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ADMINISTRATORS COACHING TEACHERS:
INSERVICE STAFF DEVELOPMENT

BY

©

EDWARD CALVIN FRASER

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

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E. Calvin Fraser

P.O. Box 471
Edson, Alberta
TOE OPO

Date: October 10, 1986

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Administrators Coaching Teachers: Inservice Staff Development submitted by Edward Calvin Fraser in partial fulfilment of the requirements for the degree of Master of Education.

(Supervisor)

Date Oct 3, 1986

ABSTRACT

ADMINISTRATORS COACHING TEACHERS: INSERVICE STAFF DEVELOPMENT

Edward Calvin Fraser

Administrators in Alberta have in recent years been faced with increased demands for accountability and expectations that they will monitor classroom performance. Many have until now downplayed or ignored this part of the job in favour of more purely bureaucratic chores. They often lack the specialized training to do this part of their job. In addition, many have been in the field for several years and are only marginally aware of some of the newest research on effective teaching. They are looking for help in accomplishing their job more effectively.

This study assessed for the first time an Alberta Teachers' Association sponsored course that is designed to help administrators and others work effectively in monitoring and improving classroom effectiveness. The study involved a group of thirteen administrators and one classroom teacher in the study of

The study investigated the attitudes of the participants about the degree of success of the course in encouraging administrators to learn new techniques and to work with teachers in improving their instructional practices.

Data was gathered by using a pre-test and a post-test, log records, and participant interviews. Analysis of the data revealed that the participants increased their knowledge about effective instructional practices, and about ways to transfer this knowledge to teachers. Many of the participants expressed high levels of intention to work actively with teachers in the implementation of the teaching practices.

Among other recommendations the author suggests further research and development of the course with a particular focus on differences in implementation in elementary and secondary schools.

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Chapter One
Introduction

The Study

One proposed way to make an administrator more effective in the staff development part of his role as instructional leader is coaching. Coaching is a method of staff development that links classroom observation and feedback, integrated teacher-coach decision making, and research based knowledge of effective teaching practices. The coach works with a teacher to bring about mutual adaptation of the research based knowledge and the teacher's instructional practices. The coach can be a colleague, a supervisor, or an external consultant. For this study the participants trained were, with one exception, administrators.

Other studies have examined coaching as a successful method of transfer of training (Showers, 1982, 1983) and as a method of inservice training (Joyce and Showers, 1980, 1983). These studies have focussed on improvement in student achievement as a measure of success. This study focussed on the participants in a coaching program, and in particular on their attitudes, beliefs and behaviours. Attitudes were inferred from the stated beliefs and the recorded behaviours of the participants.

The Problem

The study was an exploration of administrator behaviour as it is affected by the program Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985) offered in Alberta under the sponsorship of the Alberta Teachers' Association. The purpose was to identify changes, if any, in the attitudes, beliefs, and behaviours of the administrators participating in the project, and to compare the findings with the stated goals of the program.

Data gathered provided information pertinent to the following broad questions:

1. What changes in attitudes, beliefs and behaviours occur to administrators enrolled in the ATA sponsored program Coaching Teachers to Higher Levels Of Effectiveness (Barkley, 1985) ?
2. To what extent do participants in the program believe that the course has contributed to improving their effectiveness as instructional leaders ?
3. To what extent does the program live up to its stated goals ?

Limitations

The study had four limitations.

1. The study was restricted to members of one school division. This is typical of this course particularly when it is offered in a rural area, and therefore was a realistic test of the course.
2. All participants were volunteers. Again, this is typical of this course. It is offered by the Alberta Teachers' Association strictly on a volunteer basis. Therefore this too was a realistic test of the course.
3. The researcher and the course instructor were the same person. As there were at this time only four active instructors in the province, this was unavoidable.
4. The course was offered throughout the months of April and May - not ideal time for administrators who are already worrying about next year. This timing limited the involvement of the administrators in in-school coaching projects. This timing of the course was necessitated by other events taking place in the School Division.

Significance of the Study

Administrators in Alberta and elsewhere have in the past few years been faced with increased demands for accountability and expectations that they will monitor teacher classroom performance. They must balance this request with the increasing professionalism of teachers and their own desire to retain a warm collegial relationship. Coaching proposes to offer them a system of staff supervision that will meet these demands.

Inservice and staff development budgets are stretched to the limit in this time of economic recession. It is important to verify that staff development programs offer sufficient direct benefits. Coaching is a system of inservice staff development that proposes to offer benefits in terms of innovational implementation, direct improvement in instructional effectiveness, expansion of the decision-making base, and increased unity within the school. The contribution to knowledge of this study was an assessment of the coaching program offered by the Alberta Teachers' Association.

Summary

This chapter presented a general overview of the study. The chapter outlined the problem, its limitations, and its significance.

Chapter Two

A Review of The Literature

Coaching

This chapter will present a review of the literature related to coaching as a method of inservice staff development. First a need for inservice supervision for improvement will be established. Then, a review of the material based directly on coaching, as well as material based on the individual components of coaching, and on related research topics will be presented.

Secondly, a review of the literature on each of the topics of the course Coaching Teachers to Higher Levels of Effectiveness will be presented. This includes communication skills, nonverbal communication, questioning, learning styles, and the perceptory learning system SDLOC.

An increasing need for staff development

The last two decades have seen increasing demands for administrators, consultants and supervisors to participate in instructional improvement programs. The role of the staff supervisor or principal has increasingly become one of instructional leader. Young and Heichberger (1975) in a study of teachers of rural and urban New York found that 82% of the teachers saw a need for staff supervision. Nickel, Traugh and Tilford (1976) studied a group of first-year junior high school teachers and found that they wanted administrators to spend far more time with teachers in the classrooms. Diamond (1978: 91) acknowledged this demand for increased teacher supervision with the qualification that despite the fact that "there is still no widely accepted agreement about what effective or productive teaching is. . . teachers are less and less inclined to respond seriously to supervisory authority unless it is coupled with competence and is of value in the classroom." Diamond's(1978: 93) definition of teacher supervision illustrated current beliefs about the supervisory role:

> Supervision can be seen simply as the means by which a system enhances the teaching-learning situation through the input of others than the classroom teacher in order to provide for growth in the effectiveness of instruction and improvement in the quality of the experience of the learner.

This demand for instructional leadership was reinforced by research that shows the principal to be most effective when he functions as instructional leader. Lipham (1986:2) listed five essential functions of the principal; the first is "improving the instructional progam" and the second, "working effectively with staff." Young (1980) explained a very effective supervision program in the Vellejo City Unified School District that has the "principal's primary role as an instructional leader."

Learning magazine (August, 1980) predicted the trend of the eighties to be a move toward linking research-based knowledge on effective teaching and classroom performance. The article suggested that the move would be through first training the administrators who will be responsible for developing effectiveness in others. It said, "Those who are responsible for increasing the effectiveness of others' teaching must develop skills in observing teaching, analyzing that observation, and, from that analysis, determining those teaching decisions and behaviours that need labeling and reinforcing and those teaching behaviours which need changing and/or elimination."

The demand for effective on-site instructional leadership first became prominent with the development of Clinical Supervision by Morris Cogan and others from Harvard University in the 1950's. Reilkoff (1981:30) cited Cogan (1973); Goldhammer (1969); Wilhelms (1973); Mattaliano (1977); Krajewski (1976); Hagglund (1978) and others whose criticisms of clinical supervision included "time, rigidity, expense, complexity, lack of empathetic intercourse on the part of the supervisor and the supervisee, and failure to consider teachers' growing professionalism." Despite these criticisms the basic activities of clinical supervision, pre-conference, observation and post-conference, remained present in systems developed later. Often it was the focus of the observation and discussion that made one system significantly different from others. Clinical supervision concentrated on teacher behaviour, Flander's Interaction Analysis (in Amidon and Hough, 1967, 103 ff.) concentrated on student/teacher interaction, Berliner's Time On Task (1980) on student engaged time, and Reilkoff's Supportive Supervision (1981) on student performance. Joyce and Shower's coaching concept occupied middle ground linking teacher behaviour and student performance.

The Trend to Coaching In Alberta

Teacher growth has been seen as an important, on-going ability essential to teaching. Joyce and Showers (1983:31) suggested that a lack of growth in teachers is more damaging than a lack of growth in any other professional group. One important Alberta educational phenomenon of the 1980's was been an awakening awareness that there is a body of knowledge, supported by research, about many of the classroom behaviours of successful teachers. This awareness was accompanied by attempts to expose practising teachers to the research based knowledge.

Phi Delta Kappa brought to its members information about a California

based program called TESA (Teacher Expectations and Student Achievement, Kerman, 1980). Many Alberta school boards, including the Yellowhead School Division and the East Smoky School Division) spent heavily training trainers and working teachers through the program.

Madeline Hunter's work from UCLA was brought to Alberta through her own presence at many conferences and conventions and by private consulting firms such as Thiessen and Associates, a Moose Jaw, Saskatchewan, based private educational consulting firm. Many school boards, including the Red Deer Public School District, spent heavily training principals and consultants to pass this information on to the teachers.

The Alberta Teachers' Association became involved by offering the courses designed by Performance Learning Systems of New Jersey - Project T.E.A.C.H., PRIDE, and Teaching Through Learning Channels (Hasenstab, 1973, 1977, 1984).

All of these effectiveness programs have been highly praised by trainees for their ability to teach research-based effective teaching skills. And yet, all of these programs stopped short of ensuring that the skills being worked on are actually integrated into the teacher's active repertoire. The designers of many of these programs have joined other researchers in recognizing coaching as a way to ensure this integration. Hunter (1985:60), Berliner (Brandt, 1982:14), Barkley (1985), and Joyce and Showers (1983:19) promoted coaching as an extremely effective way to transfer the research based knowledge into practice. A number of Alberta school districts have implemented programs based on coaching. The Edmonton Public School District Teacher Effectiveness Program is a large scale coaching program (Maynes, 1982).

In 1985 the Alberta Teachers' Association invited Steve Barkely from Performance Learning Systems of New Jersey to present an intensive, one week workshop to administrators at their annual Summer Conference. The course, Coaching Teachers to Higher Levels of Effectiveness, (Barkley, 1985) originally developed at the request of the University of South Florida, was well received. Post-course evaluation forms showed that the participants believed the concept would work and planned on implementing coaching programs. In addition to training a number of Alberta teachers as instructors in this course, the ATA held a second coaching program at the 1986 Summer Conference. This program was locally developed and offered by personnel from the Edmonton Public School District (Harrison, in print).

The Coaching Process

The term "coaching" was first proposed by Joyce and Showers (1980:384) as a systematic process for teachers to analyze content to be taught, to tailor the approach to be taken, and to make very specific plans to help students adapt to a new teaching approach.

Later Joyce and Showers (1981:170) expanded the concept to show its inclusion of an observation and feedback cycle in which the teacher and the coach together examined where to use certain strategies, evaluated their use as observed, and planned for improvement. This collegial approach recognized the need to help teachers with new learning beyond the skill learning level, that is, help with the adaptation process.

Still later Joyce and Showers (1982:6) stated even more strongly the need for a coaching component in teacher training to ensure the effectiveness of the training. They saw coaching as having five major functions: provision of companionship, giving of technical feedback, analysis of the application, adaptation to the students, and personal facilitation. They saw, too, benefits for the coaching partner who can more easily see the problems of omission and confusion when someone else is doing the teaching and who collects and expands his ideas as a result of the observations.

Coaching has four major components: pre-conferencing, observation, feedback including the giving of information, and an on-going cyclical nature. A key element in the direction of each component is the purpose of the coach at each stage. Showers (1983b: 3-4) says that the "first function of coaching is to provide support and encouragement to another person during a difficult process." Next is the provision of technical feedback about which she says, "Feedback implies no judgement about the overall quality of teaching but is confined to information about the execution of relevant skills or strategies."

Conference time and teacher-coach communication must be centered on an objective. There may also be lesser goals, but these must not be allowed to interfere with the primary objective (Hunter, 1980: 408). The pre-conference may have as its objective the building of trust and rapport or confidence. It may be a planning conference in which the coach helps the teacher work new strategies into his lesson design, either by helping to match strategies and instructional objectives, or by locating and organizing materials and preparing teacher statements and strategies. The lesson design conference may even become the focus of the coaching (Showers, 1983:25).

Observation is critical to coaching. Sergiovanni (1984:360) discussed the observation and reporting phases of teacher evaluation. His comments relate equally to coaching. He noted that both the teacher and the supervisor (coach) bring their own values and viewpoints to the teacher observation. These "multiple biographical aspects" must be considered and as much as possible set aside.

Mireau (1983) and Hunter (1982) note the importance of comments following observation to be based on observed behaviour. It is necessary for the observer to have an accurate image of specific behaviours that occurred. This may involve the use of audio or video recordings, or note taking. The least problems appear to be associated with the use of either anecdotal or script-taping notes. Using either system the coach tries to record in writing what takes place during a lesson. He records teacher and student verbals and non-verbal behaviours, interactions, classroom climate, seating arrangements, teacher proxemics, student involvement - everything possible. It is much easier to identify problems when someone else is doing the teaching. Thus the coach is able to be objective and to provide help. After he has done observations of many different teachers trying new strategies, the coach will have a wide knowledge of how the skill can be used, and thus he has more to share with each teacher. After the observation, but prior to meeting with the teacher, the coach reviews his notes and chooses specific, observed situations and behaviours as recorded upon which to base his coaching comments, questions, and suggestions. The advantage of this method is that while it reveals most of what existed in the classroom, it allows the coach to work only from those behaviours which relate to his purpose.

It is these specific observed behaviours which are shared in the post-observation conference. The conference may have one of many purposes (Hunter, 1979). This may be one of a progression of conferences aimed at long-term growth. It may be entirely positive and identify only teacher strengths. It may reinforce the teacher's use of effective skills and is likely to promote continued use of these skills. It may provide a foundation of mutual respect upon which growth can occur. The conference could also expand the teacher's effective skills or allow either the teacher or the coach to identify areas of necessary growth. Whatever the intended objective of the conference, coaching conferences are characterized by their positive, supportive nature, their diagnostic and prescriptive potential, the use of behaviour specific examples, and the on-going structure (Hunter, 1980).

Approaches to Coaching

There are two basic approaches to coaching, field dependent or field independent. The field dependent approach may be as broadly based as the teacher and the coach agree upon. The field independent approach is much narrower in its approach.

There are two variations in the field dependent approach. In both the coach must be prepared to enter the classroom with an open mind, prepared to accept whatever he finds as a base upon which growth can be built. In the first variation as offered by Performance Learning Systems at the 1985 ATA Summer Conference (Barkley, 1985) and as in use now in several Alberta schools, the coach records behaviour he finds worthy of praise, behaviour about which he has questions, and makes suggestions for growth based on the behaviours that he has praised and discussed. The coach must remain positive and supportive throughout the process. His role is that of pedagogical expert ready to provide information or to help find information on any teaching behaviour that comes up in the discussion.

In the second field dependent variation based on the work of Joyce and Showers and Jane Stallings (Mohlman, 1983:37) the coach enters the classroom with the intent of diagnosing problems and prescribing solutions for them. The selection of problem may be predefined by the coach and the teacher or left to the discretion of the coach. The teacher and coach may, for example, agree before the observation that the coach will restrict his comments to discussion of the teacher's questioning techniques. Or, they may agree to let the coach choose any behavioural area in which he sees room for improvement and feels confident of being able to help.

The field dependent approach may require a great deal of work from the coach who must be trained in a wide variety of teaching skills and approaches, and who must be prepared to help the teacher research within this wide variety of skill related knowledge. This approach has a very positive and supportive focus and allows the teacher and the coach to develop a strong collegial base of respect through which growth can occur.

The field independent approach involves coaching from a research proposition base. Madeline Hunter is one proponent of this style of coaching (Lambert, 1985). The coach first trains the teacher in a research-based proposition about effective teaching behaviour, then observes the teacher applying the new behaviour, diagnoses and prescribes improvement of the skill, and determines when the teacher is ready to move on to another proposition.

Again, the field independent approach requires a supportive coach. There is less need for a wide variety of outside resources to be available to the coach as the selection of teaching behaviours open to discussion is more limited. The coaching process begins as the teacher moves the new skill from the training to the classroom (Showers, 1983:3).

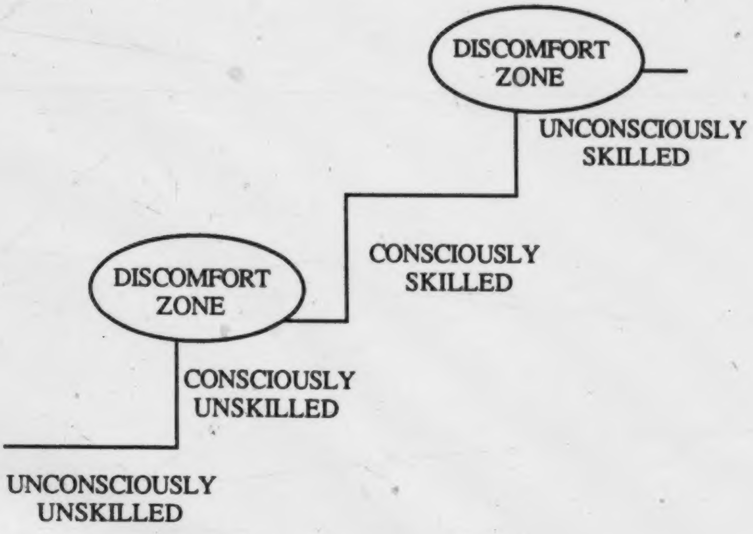
The selection of which approach or model to choose may depend on the situation, the coach, or the teacher. The coach may choose one model at one time and another later. He may prefer to develop his open model to
meet situational needs. There is support in research for all approaches (Lambert, 1985).

Where Coaching Helps

Joyce and Showers (1983:30) and Thomas Gordon (Maynes, 1982) expressed concern about the tremendous discomfort experienced by teachers faced with the need for change. They suggested that the greater the need for change, the greater the discomfort it will cause. Gordon showed the movement of teachers in training from a level of blissful ignorance, unconsciously unskilled, to an awareness of deficiency, consciously unskilled, to an acquisition of the deficient skills, consciously skilled, and finally to the addition of those skills to one's deliberate, active repertoire, unconsciously skilled. Showers suggested that training may also bring about discomfort as it awakens an awareness of skills existing unconsciously before training. These skills are brought back to a consciously skilled level before being returned to the unconscious level where they can be chosen deliberately instead of randomly.

Showers (1983b: 3) indicated that coaching program participants must recognize that "the quality of performance diminishes during the period of transition from skill acquisition to complete vertical transfer." Coaching, according to Joyce and Showers (1983:17), can be an efficient way to overcome the discomfort of this decreased efficiency. They suggested that there is a particular need when the retraining adds new skills to a repertoire as opposed to fine tuning existing skills (See Figure One).

FIGURE ONE


DISCOMFORT ZONE
UNCONSCIOUSLY SKILLED
CONSCIOUSLY SKILLED
DISCOMFORT ZONE
CONSCIOUSLY UNSKILLED
UNCONSCIOUSLY UNSKILLED

Adapted from the work of Thomas Gordon as used in the Edmonton Public School District Teacher Effectiveness Program (Maynes, 1982).

Transfer and Executive Control

Joyce and Showers (1983:5) referred to horizontal transfer as the shifting of a skill directly from a training situation to a problem solving situation. When there is little difference between work and training situations, horizontal transfer with little need for adaptation is sufficient to allow a teacher to use the new skill.

When the training situation differs from the work situation it is more difficult to transfer the skill to solving problems. A great deal of adaptation may be required to enable a new skill to merge with an existing repertoire. Some existing skills may be dysfunctional for the success of the new skill. The extension of the learning required to make new skills useful is called vertical transfer.

Successful vertical transfer of a skill brings it to a level of executive control. This includes the understanding of the purpose and the underlying theory of a skill, the knowledge of how to adapt the skill in its various uses, and the ability to integrate it smoothly with other skills. The development of executive control of a skill is essential to the continued successful use of the skill in the classroom. Joyce and Showers (1983:26) suggested coaching as a way to achieve vertical transfer.

Joyce, Hersh, and McKibbin (1983:142) suggested that training for improvement has in current practice four major stages. The first is a knowledge oriented component that offers theory and information about the new skill. They suggested that fewer than ten per cent of teachers will acquire vertical transfer of the skill to their repertoire with this level of training. In a separate review of the research on staff development Joyce and Showers (1983:16) suggested that as few as five per cent of teachers would fully integrate new knowledge after this level of training.

The second stage of current training is a modelling stage in which teachers see the new information being demonstrated. Joyce and Showers (1983:16) believed that this identification of the new skills in use will contribute to retention of the knowledge, but will be of little value in achieving vertical transfer. They suggest that not many more than ten per cent reach mastery at this level of training.

The third stage of current training is the addition of a safe practice session accompanied by feedback from instructors or from peers who are also studying the new skill. As many as twenty per cent of teachers achieve vertical transfer of the new skill at this level of training.

The fourth level of current training is the addition of coaching at the point of implementation as the teacher attempts to use the new skill in his own work situation. This coaching may be provided by others already proficient in the skill or by others who are also in the process of achieving vertical transfer of the skill. A teacher is helped with interpreting student responses to the skill, and with adaptation as the adjustment to the new skill is achieved. Showers (1983a:26) found that teachers did not achieve vertical transfer without coaching but suggested that coaching provided a near guarantee of vertical transfer. She stated, "While this experience happened at different times for different teachers during the coaching treatment, the result was fairly uniform." (1983b: 16)

Who can coach seems to be of less importance than the use of the coaching approach. Joyce and Showers (1982:7) and Hunter (Brandt, 1985:65) agree that coaching can be provided by peers, trainers, supervisors, college professors, or administrators. Hunter believes that the coach can be anyone with the skills necessary to help someone else perform better. She believes too that the coach need not be familiar with the content of a lesson to improve the teaching process. Joyce and Showers see as ideal an environment in which every teacher is free to coach every other teacher. They would establish coaching teams of four to six teachers who would observe one another and provide helpful information and feedback. They would each receive such information directly from the others and indirectly by observing the demonstrations of their colleagues.

Although Joyce and Showers have concentrated their work on the use of coaching to improve the transfer of training, others have used coaching to diagnose what current practice is for a teacher, and to prescribe and facilitate the improvement of that practice. Hunter (Brandt, 1985:64) described coaching as a way to identify that a teacher "knows this and he's ready to learn that". Jones (1985) described the use of the coaching methods to help administrators. Each school principal in the district developed a supervision policy in cooperation with his school staff. As the principal or vice-principal implements the policy, he is observed and then coached by district personnel. The use of a positive collegial approach at all levels is emphasized.

Showers (1983:25) in a study on the use of coaching found that teachers admitted candidly that coaching was their encouragement to use the new skills. Without the coaching they would have discontinued the use of the new strategies before they were successfully integrated. After a study of peer coaching (Showers, 1984:50), teachers coaching teachers, Showers recommended that all teachers should be coaches.

Hunter (Brandt, 1985), Joyce and Showers (1982), and Barkley

(1985) see the principal as a teacher motivator and therefore ~~as~~ a teacher coach. All see staff development as a major function and recommend coaching. Berliner (Brandt, 1982:14) suggests that "principals and central office supervisors should concentrate their staff development efforts on coaching".

Mireau (1983) explains the Edmonton Public School District Teacher Effectiveness Program in which consultants, principals, and later teachers are trained to be coaches. The success of the program show in its survival and expansion within the district.

The Need For Coaching Identified in Related Literature

It is not easy to bring about change in schools. Showers (1983b: 5) concluded from the research on teacher training that, "most of the skills and knowledge gained by teachers in inservice programs are never implemented in the classroom and therefore have no opportunity to influence student learning." Lieberman (1982:249) wrote of the "myth that paper statements, broad goals and money can radically alter the way schools work." Barth (1985:356) reported a conversation with twenty principals in which "not one of them suggested changing his or her behaviour to comply more closely with the research findings." McLaughlin (1976:169) identified two implementation processes that do not bring about the desired change "co-optation" in which adaption of the project design occurs but no change on the part of the staff or the institution, and "nonimplementation" in which the project either breaks down or is ignored. The promise of coaching and therefore the choice of coaching as a staff development system is consistent with findings in many related studies.

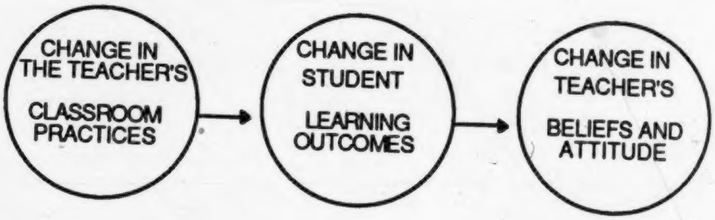
Thomas Guskey (1985:58) used research done by others showing that teachers became committed to a practice only after they had been successful with it in their own classrooms. His new model of staff development (see Figure Two) considered the claims of Joyce and Showers (1982) that teachers required time and experimentation to fit new skills to their classroom situations and the need for mutual adaptation of the teacher and the skill as shown by Berman and McLaughlin (1978).

Guskey saw a need for a system such as teacher coaching to help bring about change in classroom practices as a teacher's own beliefs and attitudes are often not entirely supportive of change. This need is supported by Joyce, Hersh and McKibbin (1983:142) who speak of the habit of growing and the habit of being withdrawn and the need for staff development leaders to work on encouraging and/or changing teacher habits. They are both suggesting that before skills and habits of teachers are changed, it is necessary to make the teacher successful with the new knowledge and practices.

Joyce and McKibbin (1982:74) categorized teachers into five growth states: omnivores who use every available aspect of the formal and informal systems for growth for improvement, active consumers who make use of some of the systems available to them, passive consumers who will make use of what is brought to them, resistants who actively or surreptitiously oppose change, and withdrawn teachers who avoid involvement in improvement activities.

Figure Two

GUSKEY MODEL OF STAFF DEVELOPMENT


CHANGE IN THE TEACHER'S
CLASSROOM PRACTICES
CHANGE IN STUDENT
LEARNING OUTCOMES
CHANGE IN TEACHER'S
BELIEFS AND ATTITUDE

"Learning Outcomes" in the model refers to whatever evidence teachers use to judge the effectiveness of their teaching.

Joyce and McKibbin (1982:78) also looked at the social environments of schools. They concluded that where an informal social system of a school is influenced by a resistant or withdrawn teacher, it is virtually impossible to implement a school-wide change or growth program. Staff development in such schools must be done on an individual basis.

Glickman (1980:178-179) found that teachers passed through up to three stages in their professional growth throughout their careers. Beginning teachers operated at a survival level looking for ways to succeed immediately in the classroom. Once assured of success teachers move to a classroom and student oriented stage that focuses on expanding the educational opportunities and experiences for students. The third stage is an altruistic state of trying to improve education for the collective group of students and teachers. Glickman (1980:179) concluded that to bring about growth in teachers it is necessary to vary the amount of supervisory responsibility from teacher to teacher and from time to time changing the approach from directive to collaborative to nondirective in accordance with the level of professional development each has achieved.

Joyce and McKibbin and Glickman concluded that to be effective much staff development work has to be done on an individual basis. Coaching is one system of staff development that encourages work with individuals and that is sufficiently flexible in approach to meet individual needs and differences.

Kuzsman and Harte (1984) called for a change in teacher supervision practices to ensure a focus on improved performance through learning theories, reality strategies, and teaching methodologies. They note that current practices encourage continuation of mediocre teaching practices by rewarding them with acceptable reports. Coaching may overcome this problem.

Sweeney (1982:350) attributed the level of effectiveness of a school to the principal. He concluded that principals must emphasize instruction, be assertive, be results-oriented and maintain an atmosphere conducive to learning. Coaching has been suggested as one way for the principal to fulfill these role expectations.

McCormack-Larkin (1985:34) in describing a successful school effectiveness project noted that it included a shift from "depending on outside educational experts to recognizing the expertise within... " i.e. coaching for staff development instead of one-shot workshops with outside experts.

Berliner (Brandt:14), who has worked primarily with the concept of increased student time on task, believes that all teachers will benefit from coaching and that principals and central office supervisors should concentrate their time on coaching.

The Rand study, Teacher Evaluation, (Wise, Darling-Hammond, McLaughlin, and Bernstein, 1985:11) identified one of the purposes of evaluation as individual staff development from a formative viewpoint. The same study (pages xi - xiii) proposed a number of conclusions and recommendations. Coaching is consistent with all of them. Coaching has varied approaches which allow supervisors to compare teaching consistency with requirements and then bring about a closer match. It represents a commitment of resources far beyond a minimum standard. It provides for the application of research based knowledge to extend effective practices and to remediate ineffective ones. While always directed towards the purpose of individual improvement, coaching will inevitably bring about school improvement. Coaching involves the teacher at all stages of examination of his performance and gives him a realistic picture of his strengths and weaknesses. It is intended to provide a way to direct resources to improvement of specific behaviour as observed in the classroom. It is an allocation of resources based on need and is designed to promote individual acceptance of change.

Goodlad (1982) found that teachers use a very small number of strategies in their teaching. Coaching not only exposes teachers to research based knowledge of ways to expand their repertoire, but also provides them with support and guidance to match the skills with their objectives.

Hunter (1979, 1980, 1984, Brandt, 1985) labelled teachers as decision makers and stated that teachers need help knowing what to consider before acting and therefore require sound, research based theory. She recognized the inability to transfer teacher intuition, and the need to change intuitive based knowledge into research based knowledge. She saw coaching as the best way for teachers to grow professionally, and criticized herself for not promoting and utilizing coaching earlier.

Glickman (1984) identified four reasons for a lack of improvement of instruction. A coaching program would provide solutions for three of his reasons, and help with the fourth. The invisibility and isolation of teaching would be eroded as the teacher received a great deal of attention from the coach. The lack of professional dialogue would be overcome as teachers and coaches spent much time discussing and solving educational problems. The bureaucratic and restricted choices open to teachers would be expanded as teacher and coach explored new ways to deal with old problems. The fourth problem of inverse teacher responsibilities would be at least partly alleviated by having a more experienced coach to share in the decision making.

After an examination of the research on school effectiveness, Huddle (1985:62) proposed eight messages from the research that would improve current practices. Coaching is one of his suggestions. It is also consistent with his seven remaining recommendations.

Kindsvatter and Wilen (1981:525-529) developed the conference category system of analyzing conferences for improvement. They identified nine skill areas of conferencing that can be examined and improved. The nine include: 1) climate building, 2) target setting, 3) questioning, 4) commentary, 5) praise, 6) nonverbal communication, 7) balance, 8) sensitivity, and 9) closure, They also include an instrument by which an observer could help a coach improve his conferencing skills with teachers. Even coaches can be coached.

Kemmis and McTaggart (1982:7) expand on Lewin's system of "action research" that is also consistent with coaching. They speak of four basic aspects of the process:

> - to develop a plan of action
> - to act to implement the plan
> - to observe the effects of action in the context in which it occurs
> - to reflect on these effects as a basis for future planning, subsequent action and so on, through a succession of cycles.

Importantly, Kemmis and McTaggart said, "the action researcher will carry out the four activities *collaboratively* , involving others affected by the action research process." From the use of the action research process they saw three benefits: the improvement of practice, the improvement of understanding (individually and collaboratively), and the improvement of the situation in which the action takes place." (9)

Lieberman (1982: 251-255) identified several factors that prevent implementation of change. First, the pressures of having "to deal with a group" at the same time as having "to deal with each child as an individual" caused Lieberman to conclude that "teacher style gets forged in the dailiness of work" and that teachers will "protect their style militantly."(251) Secondly, the isolation of the job makes teachers suspicious. "So pervasive is the isolation of teachers that one mistrusts other adults outside one's own domain." (252) Thirdly, teachers strongly demand something practical. "something concrete that works now." (252) Ready application of the

learning to the teacher's own situation is essential. Fourthly, teacher satisfaction is so heavily derived from their students that "it often leads teachers to protect their classes vociferously and be mistrusting of other adults."253 Lieberman saw this result in "the schizophrenic nature of teaching. One is always looking for new ideas, yet one is closed to them." (255)

Another reason for the failure of teachers to implement improvement projects was given by Barth. He noted that "adults usually act on their [own] conceptions of quality." (1985:357)

The failure of many projects in the implementation stage has led researchers to knowledge about what will work. McLaughlin (1976: 168) stated:

> Because classroom organization projects require teachers to work out their own styles and classroom techniques within a broad philosophical framework, innovations of this type cannot be fully specified or packaged in advance. Thus, the very nature of these projects requires that implementation be a *mutually adaptive process* . Specific project goals and methods must be made concrete by the users themselves as they acquire the skills appropriate to the innovation.

McLaughlin also identified "debate concerning *who* should make project operations more specific, *how* it can be done, and *when* specificity should be introduced." He notes that one approach wants "more specificity prior to local initiation" (177) to standardize implementation regardless of the setting. The other approach, found most effective by McLaughlin, "assumes that local variability is not only inevitable, but a good thing." (178) In support of this second approach he noted that the Rand Change Agent Study "found that all successfully implemented projects in our study went through a process of mutual adaptation to some extent." (178)

Barth (1985: 358) offered

> two workable strategies for improving the schools:
> 1) somehow get teachers and principals to work on closing

> the gap between the ways their schools are and the way people outside their schools would have them be or 2) work toward closing the gap between the way the schools are and the way those within the schools would like them to be.

To bring about change within the schools there must be motivation for teachers to want to change. Leithwood and MacDonald (1988:115) listed eight categories of teacher needs that function as motivators. Four are related to student learning, two are based on keeping teaching to manageable proportions, one is recognition of others, and the last is fulfilment of self. Bentley (1986: 31) used other but complementary research to reach her conclusion that, "The three major factors that contribute to teacher motivation are a) participatory management, b) inservice education, and c) supportive evaluation (Ellis, 1984; Brodinsky and Neill, 1983)."

Heibert and Farber (1984:24) cited Coates and Thoreson (1976) Bensky et al. (1980) and Schwab and Iwanicki (1982) in reaching their conclusion that "teachers who have mastered a variety of teaching strategies will find their jobs less stressful."

Pratt and Crowther (1986) found that effective principals play an active role in helping teachers with instruction ." (3) They cited Pitner (1982:6) who found that "the degree to which the principal works closely with teachers on instruction correlates positively with teacher job satisfaction and positive attitudes." They also cited Kelsey (1983) whose "research in British Columbia has indicated that leadership in the instructional program and its organization is the most salient dimension in superintendents' reports on school principals." (3) Lastly, Pratt and Crowther examined administrator training. They found that administrators ranked courses in instructional management as first in necessity (out of thirteen standard topics), second in usefulness, and second last in listing courses they had studied. (5) This lack of training and confidence in their abilities to be effective at analyzing teacher behaviour and helping to improve it prevents principals from being willing to enter into instructional improvement programs. Betty S. Young(1980: 11) reflecting on her days as a principal said that "I wasn't so sure I could be all that helpful to teachers - so other matters took a larger share of my time. Then, as I learned to identify, label and teach to some specific instructional practices, I found myself spending more time in classrooms and with teachers." Such comments show a need for courses such as Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985) to provide administrators with common labels and specific proven instructional behaviours to develop.

Current Programs

On-going staff development programs in Edmonton (Mireau, 1983) and in St. Stephen, New Brunswick (Jones, 1985) have already been identified. Mireau also referred to similar programs in existence in Toronto, Pittsburgh, Virginia, Wisconsin, North Carolina and other centers. Servatius and Young (1985) described a coaching program in operation in Santa Clara County, California. This program is based directly on the work of Joyce and Showers. The level of satisfaction was so high that the writers wished never again to offer staff development program without coaching. Young (1980) explained the Vallejo City Unified District (California) program in which the superintendent was in classrooms one day each week and principals worked with two teachers each week promoting teacher effectiveness. Central Office personnel observed the principals throughout the process and provided them with feedback to help them improve and expand their repertoire.

The ATA coaching course offered in the summer of 1985 (Barkley, 1985) resulted in many school-based coaching programs. The Yellowhead School Division is expanding its involvement and the Fort McMurray School District brought Steve Barkley of Performance Learning Systems for an inservice to expand its involvement. A second ATA course on Coaching was offered in August,1986 (Harrison, 1986).

Opposition to the Concept

Some opposition to coaching surfaced in the literature. Ruth Wade in a mega-analysis of 225 research studies on teacher inservice practices concluded that coaching was no better than an average way to approach instructional improvement. She singled out coaching as one method that did not have the potential promised by other researchers. She stated "the evidence is beginning to mount that coaching, as an instructional technique does not have the potential to alter teacher behaviour." She suggested that it may in fact at times not even be effective (Wade, 1983:53). Wade continued to cite Levinson who proposed four reasons why coaching might fail: the lack of time to develop a relationship based on mutual respect, lack of tolerance for giving people time to grow (including the use of negative information for evaluation before growth occurs), lack of knowledge in how to foster independence, and the universal feelings of rivalry and inferiority.

Communication Skills

The communication skills taught in Coaching Teachers To Higher Levels of Effectiveness have a double purpose. They are taught to supervisors as effective skills to use in conferencing with teachers and as effective skills to teach to teachers to use with students. An assumption is being made that what are effective communication skills with students are also effective communication skills with adults. All of the communication skills taught in Coaching Teachers To Higher Levels of Effectiveness have been taught since 1973 in Project T.E.A.C.H. and evaluations of this course have shown the success of the skills with adults as well as students. The course trains participants in listening to the other person, responding, and directing a conversation. It trains congruency among phrasing, tonality, and body language.

Knapp (1974) showed that "how something is said is frequently what is understood. His research indicated that voice tonality, body language and unintended covert signals can be what is understood instead of the words. This forces a concentration on maintaining congruency between words spoken and tonality and body language.

Teacher responses to student questions and answers had received much criticism. Good (1981: 416) listed twelve ways in which teachers communicate lower expectations to low achieving students. Dunkin and Biddle (1974), Sizer (1984), Goodlad (1984) and Sadker and Sadker (1985) all have criticized the ways in which teachers question students, listen to students and respond to their answers. They report a high percentage of acceptance for answers that are unrelated to the question asked. Sizer (1984: 156) criticized the whole educational system which is geared to accept "the minima, genially applied." He criticized typical school requirements "to be in attendance, to be quiet, orderly, and predictable, and to pass tests of multiple-choice questions of easily divined nature."

Dunkin and Biddle (1974) showed the uses of open and closed ended questions to increase the probabilities of receiving the kind of response desired. Closed-ended questions maintain control of the dialogue with the questioner who selects the topic for discussion through his questions. The responses are limited to specific information or facts. Open-ended questions transfer much of the control of the dialogue to the person responding. Open-ended questions permit much greater freedom of response and permit the conversation to reveal much more of what is of concern to the respondant. They showed too, that the use of summarizing techniques at the end of question-answer sessions raises student achievement. Gordon (1975), and Rogers (1951) have also shown that the use of confirmatory paraphrasing increases a person's feeling of being listened to and understood and thereby reduce feelings of threat, defensiveness, aggression, anger and hostility. Numbers of agreements reached are increased and dialogue participants are left with feelings of warmth even when agreement is not reached. Confirmatory paraphrasing can be used to clarify facts, attitudes or feelings of participants.

It is important that teachers communicate to students their respect for them. Gear (1979) showed the link between teacher acceptance of student ideas and positive student attitude. Chamberlin (1981: 6) stated that teachers needed to be aware of how to help students recognize their own potential, and noted that "attitudes are changed by information not punishment." Alvord and Glass (1974), Cole (1973: 332), Caplin (1969:13) and Gnagey (19), showed that positive self-concept is directly related to achievement and motivation. Casavantes and Neary (1969:3) stated, "That sense of accomplishment and self-fulfillment may well be the single most important goal in the educational process." (Berenson (1974) showed that being aware of the level of self-concept of a student allowed prediction of his success. Alvord and

Glass (1974: 177) stated that in developing self-concept the school environment is of major importance. Thus increasing a student's self-concept will likely increase his achievement and motivation.

The value of approaching people in a positive way has been proven. Brophy (1981: 26) clarified the power of teacher praise and showed how to use it properly. Good, Biddle and Brophy (1975: 208-9) noted that teachers identified as more effective "used praise more frequently than the others." Gnagey stated that the use of negative teacher practices contributed to classroom disruption and continued undesirable behaviour. George (1973) suggested that teachers may be causing the behaviours they wish students to eliminate. Ginott (1969) and showed the self-fulfilling nature of approaching students positively and of holding high expectations for them. Casavantes and Neary (1969) showed how these expectations are communicated to the child.

Ginott (1969) showed the value of the use of empathy in building warm, positive relationships. Rogers (1951) and Gordon (1975) supported the use of empathy to recognize the legitimacy of any feelings. Once feelings have been accepted, action resulting from them can be channeled in a positive way. Baughman (1979: 29) stated "that enthusiasm, kindness, warmth, and feeling are contagious at least to an equal degree as apathy, aloofness, and drabness."

Brophy (1981: 8) Goodlad (1984: 108) and Sadker and Sadker (1985) found that classrooms were bland or neutral in atmosphere, lacking greatly in praise and approval. Sadker and

Sadker (1985:361) noted that, "Praise accounted for only 11% of classroom interactions. In more than one-fourth of the classrooms, teachers never praised student answers." Brophy (1981:26), Gnagey (21-25) and Casavantes and Neary (1969: 35) showed the need for strong teacher reactions to positive behaviour and for reduction of negative reactions to undesirable behaviour. Coffman (1981), and Dunkin and Biddle (1974), showed the need for praise and the power of such praise to raise student self-concept, to increase motivation, and to change behaviour.

Coaching Teachers To Higher Levels of Effectiveness (Barkley, 1985) trains the use of types of questions and paraphrasing to increase the value of a conversation and as tools for directing the flow of a conversation. It teaches that it is important always to accept the opinions of others as legitimate whether one is in complete or partial support or disagreement, and to use the other person's agenda to develop responses. Such acceptance keeps the other person's mind open for the introduction of additional information that may help him/her change his mind. Coaching Teachers To Higher Levels of Effectiveness (Barkley, 1985) teaches the use of approval statements related to specific behaviour, the praising of appropriate behaviour, and the reduction of attention for inappropriate behaviour. It teaches the use of empathy statements to respond to and recognize the legitimacy of feelings as one tries to channel the actions resulting from those feelings in a positive way

Nonverbal Communication

Nonverbal communication, also called body language, has been widely studied by researchers interested in proxemics or kinesics. Its importance for teachers was indicated when Galloway (1971:227) said, "The teacher's nonverbal behaviour seems to be integral in the formation of student attitudes toward school." He suggested (228) that "words are inadequate expressions of our full meaning" and (229) that because of its importance he "would want every teacher and adult to be a student of his own nonverbal activity."

Merhrabian (1969) suggested that facial expression and vocal elements, account for 93% of the message in any given exchange; only 7% of the message is communicated verbally. Bailey (1984:27) says that, "Quite literally, there are thousands of nonverbal clues which occur within a single training session." He suggests that the clues which are considered important include eye contact, gestures, mannerisms, travel, touching, facial expression, posture, energy level, use of space, use of time, and silence (Bailey, 1981); Knapp, 1978; Morris, 1977)." Earlier, (Bailey, 1981) he showed teachers how to identify their own nonverbal habits.

Knapp (1971: 247) suggests that nonverbal skills and verbal skills are "not discrete categories; they work together. Nonverbal cues may reinforce, contradict, complement, substitute for, accent. or help to regulate the flow of verbal communication." Teachers need to be aware of the nonverbal messages they are sending. Galloway (1971) and Schefflen (1972) found that often teachers are not aware of the messages they are sending, and that often the nonverbal message is different than the verbal message. Knapp (1971) found that teachers send many messages through tonality and voice control, and that different moods and atitudes may be communicated by touch. He called it (1971: 249) an "often subtle and sometimes very influential system of communication." Anderson (1970) found that, "Eye contact is one of the most significant nonverbal message channels as the eyes can both send and receive messages. Knapp (1971) suggested that, "Eye contact may also act as apsychological manipulator of physical distance" and Hodge (1971) suggested that it can be used to individualize group instruction, it allows the teacher to scan for awareness of what is happening in the room, and it allows students to indicate a need for attention. He noted that eye contact is used in classrooms to send many different kinds of messages: approval, admonishment, warning, instruction, humour, exclusion, impatience, position. In particular he noted that increased eye contact to students who do not usually receive it results in increased participation. Also, pointing fingers and folded arms or hands on hips suggest to the person spoken to that the speaker is superior.

Dunkin and Biddle (1974), Collins (1978) and Rosenshine (1978) determined that teacher enthusiasm is associated with increased student achievement. Collins (1978:53) identifies the nonverbal elements that are used to identify enthusiasm. Brophy and Good (1984:116) indicated that enthusiasm "appears to be related more to affective than to cognitive outcomes. Nevertheless, it often correlates with achievement, especially for older students." Caruso (1982: 47) suggests that enthusiasm is a combination of interpersonal classroom communication and competent pedagogical skills" as students describe enthusiasm to include participation, encouragement and praise.

Schusler (1971: 285) found that self-assured teachers tend to act differently in the classroom than those who lack self-assurance. He suggested that self-assured teachers move right in with their students while the others tend to keep a "safety zone" around themselves and their desks. Teacher warmth seems to accompany self-assurance. This is supported by the work done by Reece (1962:234) who found that teachers who exhibited warmth taught with their hands relatively still, while those who lacked warmth may show impatience, nervousness or boredom with their hands. Schusler (1971: 284-285) found that self assured teachers make eye contact frequently and smile often, and Reece found that they move closer to their students. Hall (1965) and Knapp (1971) noted the cultural variations in the proximity students wanted from their teacher, but Galloway (1971) concluded that most students, depending on age, appreciate hugs and pats, arm squeezes, pats on the back, a friendly touch on the shoulder or mutual glances. Mehrabian (1968) concluded that certain postures and distances send definite messages.

Casavantes and Neary (1969: 63) stressed the need for consistent, or congruent, verbal and nonverbal messages. They say, "Adults communicate (often by sub-verbal clues) their conflicts to their children and their students." and "An adult's mixed emotions (technically called ambivalences) are communicated, and the child senses both emotions." Ginott (1972) found that mixed messages could seriously harm the building of a trust relationship.

Dunkin and Biddle (1974) and Brophy and Good (1974) showed the importance of using classroom space to the advantage of the students. Simon and Simon (1975) concluded that student placement within the classroom can determine student participation and co-operation.

Dunkin and Biddle cite a number of studies that show achievement gains possible from small group work. Gnagney also suggests moving closer to misbehaving students, removing temptations, and moving students from negative placements. Knapp (1971) suggests caution in moving a student as it is also an indicator of teacher trust in the student.

Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985) trains coaches to recognize teacher nonverbal behavious and the effects of those behaviours. It encourages the use of open postures, eye contact, proximity, and teacher movement that has been shown to create a warmer classroom climate.

Questioning

The use of questions in teaching has been of interest to researchers and teachers for many years. Socrates (469-399 B.C.) taught through the use of questions and research indicates that it has remained constant as one of the most common methods. Stevens (1912, cited in Daines, 1983: 2) found that high school teachers asked nearly 400 questions each day. Corey (1940: 750) found that teachers average one question every 72 seconds. Chaudhari (1975: 31) refers to a study in which college teachers asked forty questions per class hour. Gall (1970: 719) said, "the value of focusing on teachers' questions is that they are the basic unit underlying most methods of classroom teaching."

Frager (1979: 1) summarized recent research on questioning. He found "broad agreement on the educational benefits which can be gained throught he effective use of questioning." He listed the following points of agreement:

(1) Questioning can develop higher level thinking;
  (Sanders, 1966; Ruddell, 1974),
(2) Questioning can improve learning from text;
  (Rothkopf and Bisbicos, 1967; Weaver, 1978),
(3) Questioning can help verify the learning process;
  (Hyman, 1979; Weaver, 1978),
(4) Questioning can help motivate students;
  (Hunkins, 1972; Aschner, 1961),
(5) Questioning can aid in planning lessons;
  (Hill, 1979; Hunkins, 1972).

Frager (1979: 2) continued to note the disagreement that exists on the classification of questions into systems and the large number of systems that have been developed. Gall (1970: 708) listed eleven different questiong classification systems that separate into two types, general category systems such as Bloom's and specific curriculum classification systems such as Clement's. He noted that, "Most of the question-classification systems are composed almost entirely of categories based on the type of cognitive process required to answer the question."

Lewis (1978: 263), Rosenshine and Furst (1977), and Zahorik (1971: 359) showed that the teacher's manner of asking questions affected student achievement. Taba, Levine and Freeman (1964) and Ryan (1975: 65) showed that increasing the level of questions asked raised student ahievement, and Hunkins (1969: 58) concluded that "the use of high-level questions does significantly improve pupil's ability to evaluate information" and that a continued use of high-level questions in the educational setting should stimulate pupils to be capable of working with information rather than regurgitating it." Mahlios and D'Angelo (1983: 9) found that "Kinds of questions teachers ask can directly influence the nature of student answers, both inlength and type." and that "Some predicability in achievement can be afforded by altering question types." Furst (1967), and Thompson and Bowers (1968) showed that the most effective questioning pattern is one which includes all modes of questions and Hunkins (1969) showed that all students in all grades can respond to and learn from questions asked in all modes.

One note of caution is sounded. The necessity for applying any question categorization system cautiously was shown by Good and Brophy (1984:87, 117) who concluded that "a predominance of lower order questions is associated with high achievement gain." They note also that "It seems clear that most (perhaps three-fourths) of teachers' questions should elicit correct answers."

Dunkin and Biddle (1974: 240), Davis and Tinsley (1967: 23) found that the majority of questions asked are recall questions. Frager (1979: 6, 8) cites Guszak (1967) and Ruddell (1972) who found that about 70% of the questions asked in reading lessons were at the lowest levels. Because of the low level of questions asked, most thinking in the classroom takes place at a low level and Chaudhari (1975: 32) suggests "efforts to increse the cognitive level of classroom and textbook questions must continue." Nor can teachers rely on textbooks to have questions at all levels. Davis and Hunkins (1966: 292) and Chaudhari (1975: 32) showed the need to be critical of textbook questions as the majority may be at a memory/recall level only. Dunkin and Biddle (1974: 242) suggest that training a teacher in questioning taxonomies can lead to more use of the otherwise neglected question categories.

The research supports Frager's (1979: 8) conclusions that, "it is insufficient preparation to train teachers to only be more aware of the variety of questions they ask. Attention should also be paid to the quality of the questions within each category." Rosenshine and Furst (1971) found that using clear questions saved teacher a lot of time and energy. Dunkin and Biddle (1974: 292) cite Tisher who found that up to one third of student answers are inappropriate for the question asked, and that up to one fifth of the answers accepted by teachers do not answer the question asked. Good and Brophy (1984:89) noted the importance of question clarity to its effectiveness as a teaching tool. They also stated (1984: 118) that sometimes students are unable to "respond because questions are vague or ambiguous or because the teacher asks two or more questions without stopping to get an answer to the first one." Wright and Nuthall (1970) concluded that asking "one question at a time is positively related to student achievement, whereas the tendency to ask more than one question at a time is negatively related to student achievement. He showed too that question clarity is greatest when the question is within the level of the students such that it involves them in the lesson.

Rowe (1972: 8-9) showed that adding student time to think, "pause periods" has a direct relationhip to the number and quality of student answers received. She found that the use of pause periods increased answer length, increased student confidence, and raised student speculative thinking and involvement. Good and Brophy (1984: 118, 120) recommended pause time before calling on a student and to allow the student time to answer. They referred to science studies that have found that it is effective to "pause for about three seconds (rather than one second or less) after a question." Bailey (1982: 28) said, "The mere presence of silence can communicate the following: (1) Do you want to talk? (2) Do you have anything to add? (3) Are there any questions?"

Daines (1983: 22-23) noted that "Ways of asking questions and involving students in the asking of questions have been included in preservice and inservice programs over a period of numerous years, yet, according to this study, the thinking level of oral questions teachers ask seems unchanged." Her suggested solution was the use of coaching to train inservice teachers.

Coaching Teachers To Higher Levels of Effectiveness (Barkley,1985) supplies coaches with a general category question categorization system that is empirically reliable and easy to apply. Coaches could easily help teachers implement the system in any subject at any grade level. It is non-hierarchial and not context-bound so that it can be applied in any subject area. Teachers are advised to use questions from each category in their lessons, about 50% from the recall and comprehension categories and the other 50% from the application categories. It is easy for an observer to record the use of each category.

Coaching Teachers To Higher Levels Of Effectiveness (Barkley, 1985) also trains coaches to observe for question clarity, in particular to watch for more than one question being asked at a time, and for unnecessary words or phrases included in the question. It stresses the need for student success at answering questions and advises that coaches should expect teachers to get a correct answer from every student three out of four times that the student responds to a question. The course also recommends the use of pause times.

KTAV: Learning Styles

One of the applications of neurolinguistic research to be introduced into educational practice in the last decade was the use of sensory/perceptual channels to maximize teaching and learning. Barbe and Milone (1980: 47) called such use of modality strengths "a practical tool that can be made to work for you." Davis, Chiasson, and Schimmer (1981: 377) stated that once teachers are taught to recognize learning styles, "it will become possible to provide appropriate settings for all students without disrupting the entire educational system." Barbe and Swassing (1979: 58) noted that, "Modality based instruction does not require that children with similar modalities be grouped." Needs can be met in full-class instruction.

Barbe and Swassing (1979: 5) and Dunn and Dunn (1978:2) and others concluded that most people learn best (receive and retain information) through one of three sensory/perceptual channels: kinesthetic-tactual, auditory or visual (KTAV). These internal perceptual channels are often referred to as "learning styles, learning preferences, perceptual preferences or perceptual strengths". The research actually identified up to twenty-three preferences (Dunn and Dunn, 1978, 4); however the Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985) course concentrates on the KTAV modalities.

Barbe and Swassing (1979: 6) suggested that a student's first preference may be complemented by a secondary preference and that he may be able to learn from teaching in either channel. Alternately, a lesson could be taught in one channel and reviewed in the other. Barbe and Swassing (1979: 7-13), Dunn and Dunn (1978: 2), Dunn and Carbo (1981) and Dunn and Bruno (1985) suggested that matching the teaching methods of a lesson to the learning modalities of the students can increase student motivation and student achievement. Dunn and Bruno (1985: 11) stated "when students are taught through resources and strategies that complement their individual preferences, significantly increased achievement results." This was supported by research on the teaching of reading (Carbo: 1984), language (Bassano and Christison: 1983), and spelling (Barbe, Kreitner, Francis and Marcuson:1985).

Marie Carbo (1984:72) quoted a 1979 position statement from the International Reading Association: "Differences in the learning styles and abilities of children emphasize the need for a variety of approaches to meet those needs" and noted that the use of learning styles to help individual students has been recommended by the Council for Exceptional Children. An article in the Spring 1986 magazine of this same Council recommended the use of learning modalities to individualize directed group instruction in any content area (D'Zamko and Raiser: 1986).

Barbe and Swassing (1979: 72) suggested that teachers almost always teach in their own preferred learning style. They suggested too, that teachers may avoid teaching in their weakest preference, and that often the use of kinesthetic-tactual teaching methods is discouraged by other teachers. Barbe and Milone (1980:46-47) stated "that teachers as well as pupils have modality strengths" and claimed to be able to identify them for individual teachers by looking at the "way a classroom is organized and the manner in which instruction is carried out."

Although researchers agree that learning preferences do change as students develop, there is disagreement in the literature about when the changes occur. Dunn and Dunn (1978: 395) suggested that most students are primarily kinesthetic-tactual at the early stages, and that most learn better through the visual channel than the auditory channel until about sixth grade. Girls develop their auditory senses one to two years earlier than boys. By the eighth grade girls have improved their visual perception, followed by the boys one to two years later. Dunn and Carbo (1981: 382) and later Carbo (1984:74) reported research in which children were shown to be strongly kinesthetic/tactual first, then to develop visual strengths, and finally to develop auditory strengths. Barbe and Swassing (1979:52) found pre-elementary and elementary children had large auditory strengths. Barbe and Milone (1980: 45) found higher percentages of visual and auditory strengths in the elementary school. The disagreement extended to the selection of teaching strategies to meet individual's needs. Dunn et al. (1981: 373) noted that some researchers encourage teaching only through student strengths, while others encouraged also teaching through weaknesses to build them up. Richard Schmenck, quoted in Dunn et al (1981: 373) said, "if we roughly match our instructional technique to the student's style while simultaneously providing experience in strategies that are outside that style, we may prompt the development of flexibility." All researchers agreed that in any group of students there is likely to be a mixture of all modality preferences. Rita Dunn (1979: 430), working with a group of slow learners found that when teaching strategies were changed to reach the learning styles of the students, "many of the youngsters learned skills or facts that they had not been able to master previously." In an even more dramatic classroom project reported on by Kenneth Dunn (1981: 386-387) a junior high teacher took twenty of the worst students in a New York City junior high school and taught them according to their learning styles. He wrote, "Their academic progress has been astonishing, with some students gaining from two to four years in reading and mathematics in a ten-month period."

Friedman and Alley (1984: 77-78) provided six principles of learning/teaching styles which constitute a summary of the implications of the research for teachers:

1. Both the style by which the teacher prefers to teach and the style by which the student prefers to learn can be identified.
2. Teachers need to guard against over-teaching by their own preferred learning styles.

3. ... teachers are most helpful when they assist students in identifying and learning through their own style preferences.

4. ... students should have the opportunity to learn through their preferred style.

5. ... students should be encouraged to diversify their style preferences.

6. ... teachers can develop specific learning activities which reinforce each modality or style.

Barbe and Milone (1980) suggested that as many as 30% of students may have a kinesthetic-tactual learning preference. They stressed the importance of providing an opportunity for kinesthetic-tactual learners to learn by doing, to become involved in the learning with movement as they tend to learn best what they have done, rather than what they have seen or heard. Frostig and Maslow (1979 :45) encouraged a change in teaching to include "the use of movement in instruction. Movement is necessary for all expressive behaviours and all communication, verbal and nonverbal (gesture, stance, or facial expression)." Barbe and Swassing (1979:44) stated that kinesthetic-tactual learners are often not greatly interested by reading. They prefer stories with a lot of action, especially near the beginning and may be restless while handling books. Carbo (1984:74) supported these findings and encouraged "holistic" approaches to reading supplemented with many "hands-on" activities.

Barbe and Swassing (1979: 44) stated that auditory learners like to talk about what they are learning. They express their emotions through the tone and/or pitch in their voices. They enjoy talking but are also good listeners and learn from oral instruction whether they are talking themselves or listening to the teacher. They like to hear information and to repeat it verbally. They are easily distracted by sound. When reading, they may move their lips or quietly read aloud to themselves. Lefevre et al. (1977:) also suggest that students are able to learn verbal information better when it comes through the right ear, and nonverbal material such as music, better when it comes through the left ear.

Visual learners, according to Barbe and Swassing (1979: 44), see thoughts in pictures and detail. Their faces often reflect their emotions. Visual learners learn by seeing - they like to take notes and are able to recall information better after seeing it. They can be distracted visually and may be unaware of background noise.

In addition to sensory preferences, students may have sensory problems. Haring and Bateman (1977) identified auditory discrimination problems that may cause some students to hear incorrectly, and signal-to-background problems in which the teacher's oral presentation is lost in background noises for some students. Other students may have closure or figure-ground visual perception problems. Closure problems appear when words are hyphenated and broken at the end of a line. Figure ground problems appear when a student is unable to separate a part of a picture from its background or one question from many on a blackboard.

Teachers can identify student learning preferences in several ways. Dunn and Carbo (1981: 381) suggested that people can often successfully identify their own preferences and support the use of learning style inventory tests completed by the students themselves. Dunn and Dunn (1978:17 ff.) and the NASSP suggested the use of inventories to identify preferences, while Bandler and Grinder(1979) and Dilts (1979) suggested the use of close observation of eye movements and verb usage. Bandler and Grinder (1979: 25) and Dilts (1979) suggested that strong visual preference learners look up to access information mentally, strong auditory preference learners look sideways, and strong kinesthetic-tactual preference learners look downwards. They suggested too that students look to the observer's left when they are strictly remembering something, and to the observer's right when they must construct the information from memory. Gur and Reivich (1980) suggested that this pattern is true for 70%-80% of the 90% of the population that is either right-handed or left-handed but write with a hook).

Bandler and Grinder (1979: 25) and Barbe and Swassing (1979: 45) noted that learning preferences are often apparent in the verb choices that people make. Visual preference learners tend to use visual verbs such as "see" and "look", auditory preference learners tend to use auditory verbs such as "listen" and "hear", and kinesthetic-tactual preference learners use verbs that show movement and feeling such as "hit" or "catch".

Advice on how to teach to kinesthetic-tactual learners is offered in Coaching Teachers To Higher Levels of Effectiveness, a course based on this research (Barkley, 1985: 79):

> Teaching strategies that appeal to kinesthetic/tactual learners include writing on paper and at the board, drawing, hands-on activities with real objects that can be touched, raising hands to volunteer information using hand signals, small-group discussion, activities that involve emotions and feelings or enable students to move.

The course (79) suggests, "Students with an auditory preference respond well to lecture and discussion, as well as to tapes, records, or the radio." And says (80), "Visual learners enjoy learning from books, pictures, reading from and writing on the board or paper, viewing filmstrips, slide shows or movies - anything they can see." Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985: 80) suggests strategies to prevent auditory background and visual discrimination problems. It identifies visual distractions that interfere with student learning. Such distractions draw attention aware from what is important and can be avoided. Barkley (1985:83) suggests that teachers should use verbs that correspond with all of the students' preferences to "improve communication, build rapport and increase learning." As they are trained in the course, participants are made aware of their own preferences and ways to identify student preferences through style inventories, eye movement exercises, and through verb inventories.

SDLOC: Understanding New Information

Bruner (in Parrill-Burnstein, 1981: 58) and Hunt (1982: 17 - 22, 174) found that when people come across new information they compare it to what they already know. They check for similarities and learn from the comparison, and check for differences to learn from the contrast. Hunt (1982: 261-264) found that in many professions inferential thinking depends upon the professional having enough accumulated knowledge to be able to compare and contrast a new situation to what is already known. He found too that the more information available to us, the easier it is to look for similarities and differences, and that the more one consciously practices looking for similarities and differences, the better one gets.

Hunt (1982: 171, 261-262) suggested that after comparing and contrasting new learning or new experience with previously-held information, people label what they have learned. The labels may identify people, places, things, experiences, or concepts. These labels are used for making future similarity/difference checks. Berlin (1978) found that this ability to label crosses cultural boundaries. People in varying cultuires have tended historically to label things in similar ways. Labov (1973) and later Hunt (1982: 171) examined the ways in which people label into large classifications first and then later break them down to smaller classifications according to function. Hunt (1982: 309) also showed that the use of general labels can lead to creativity in thinking. Corballis (1974) noted that difficulty with interpreting labels is not related to creativity or intelligence and need not prevent successful teaching or learning. Thompson (1971) wrote of numerous famous individuals who overcame their difficulty with reading and spelling in school and later became very successful in a wide variety of leadership careers. His research suggested that dyslexia is simply a problem identifying labels in the same fashion as others do.

Cundiff (1972) showed how messages with definite meanings or labels can be communicated nonverbally in kinesthetic-tactual, auditory, and visual fashions. Many of these messages are instantly recognizable - a particular appearance can be labelled as a particular message (e.g. one finger to the lips). These nonverbal labels can also have near universal meanings and cross cultural boundaries.

Parill-Burnstein (1981) and Almy (1976) studied the demonstration of knowledge by children. Both show the heavy reliance of modern knowledge of how children think on Piaget. Parill-Burnstein (1981: 4) shows how Piaget, Gagne´, and Bruner each divide the learning process of a child into stages. Piaget (Parrill-Burnstein, 1981 : 4) called the use of a fact, a concept, an idea or an experience "operation". By watching the students operate with what they have been taught, teachers assess students' progress.

Almy (1976) found that to place new learning into students long-term memory it was necessary for them to use the new information with previously learned information. This stage occurs when two or more operations take place consecutively. Hunt (1982: 309) as noted above showed that when called upon to do so people could combine information in very creative ways.

Coaching Teachers to Higher Levels of Effectiveness (1985: 102) calls the SDLOC process "a natural process for integrating information into a person's body of knowledge." The manual states "We found in field testing that many teachers notice SDLOC at work in their students' minds." The course trains teachers to ensure that students first understand the similarities and differences (SD) of new learning as compared to previous knowledge or experience, form a label for the new construct (L), demonstrate an understanding of the new knowledge on its own (O), and combine and use the new knowledge with previously known material (C).

Summary

This chapter presented a review of the literature on coaching as a method of inservice staff development, and of the literature on each of the topics covered in the course Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985). These included Verbal Communication Skills, Nonverbal Communication, Questioning, Learning Styles, and the use of the perceptory learning system SDLOC.

Chapter Three

Methodology

This chapter presents a description of the research design. The instrumentation, design of the tests, participants in the study, course background, data collection and data interpretation are discussed.

Instrumentation

This study was intended to be an empiric assessment of the effects of the course Coaching Teachers To Higher Levels of Effectiveness (Barkley, 1985). The intent was to focus on the participants and to note changes in their attitudes, beliefs, or behaviour as effected by the course. A pre-test and post-test, log questions and an interview were developed for collecting data for this study. The pre-test was completed by participants at the beginning of the first session of the course; the post-test (which was virtually identical) was completed during the last half hour of course time. The log questions were completed by participants at the end of each course session. The interview was conducted with each participant in the month immediately following the course completion.

The pre-test and post-test items were based on specific elements of the course and on the formative supervision practices of the participants. The intent was to assess the participants' knowledge of the research based teaching practices, the extent of their involvement working with teachers for improvement, and to see if changes in their knowledge and involvement resulted from the course.

Part one asked about participant perceptions of their ability to judge the existence of twelve research-based effective teaching practices. Where possible the terminology included no specific technical terms. Part two asked about participant involvement with teachers to accomplish specific steps toward improvement. Part three asked participants to state the elements of teaching that they looked for in a teacher observation. Parts four and five asked about the priority given to instructional improvement and obstacles to the role of instructional leader. Part six asked participants to predict teacher reaction to change and their own actions to overcome the resistance. Part Seven asked participants to suggest teaching activities for specific topics.

A copy of the pre-test was administered to several administrators prior to its use for the course group. Suggestions and criticisms from these sources were incorporated into the final design. Those asked to take or examine the pre-test included:

a) An Assistant Superintendent of Schools and three principals who were at the time Graduate students in the Department of Educational Administration who offered criticism regarding wording and content in the test, and information regarding the time required to complete the test.

b) Professors in Educational Administration with interests in staff development who offered criticisms of design, format and content.

The comments from these sources indicated that the test did reveal the respondents knowledge of the items, that adjustment in format would allow easier tabulating and analysis of the data, that minor rewording was required, and that a considerable amount of time was required to answer the test. A copy of the test used is included in Appendix C.

The log questions were to determine what confusion if any was occurring during training, and to find out what the participants felt would help them with the course materials. Using log questions permitted the participants to ask questions or to make comments privately to the instructor. The participant responses were useful as support for the interpretation of the statistical tables, as well for providing insight to their thinking as the course progressed. They were also useful in making suggestions for improvements to the course for future offerings. Copies of the log questions are included in Appendix E.

The interview was designed to parallel content from the log questions as well as to determine participant conclusions about the course, and the participants' future intentions for formative work. From the material gathered in the interviews a profile of each participant was made. All interviews were taped, but the tapes were not transcribed. They were used as a reference source to develop the profiles. The profiles show beliefs of each participant about the effect of the course on him/her personally, the current use of the skills, and future plans to use the skills. General impressions of the course and identified strengths and weaknesses of the course are also given. These also are useful for making suggestions for future offerings of this course. A copy of the question outline for the interviews is included in Appendix D.

Participants

The participants in the course were school administrators from a large rural school division. Four of the division administrators had attended this course in the summer of 1985. On the instigation of these administrators the instructor/researcher presented a session about the course at an administrators' seminar attended by all division administrators and school board members. The seminar was held before Christmas; in the spring the course was made available to all administrators within the system at board expense. Fourteen administrators took the course at this time and several others expressed an interest in taking the course at a later date. One teacher also attended this course on the invitation of her school principal. Coming from a small school, she has found herself performing some of the functions of an administrator that were examined in this course. Although they come from schools up to one hundred miles apart, all of the participants were previously known to the instructor. They included the Division Superintendent, the Assistant Superintendent, seven principals, five assistant principals and one teacher. Two other principals registered for the course but were unable to attend on the dates chosen.

One participant was unable to complete the course. He applied for and received a job in another school division part way through the course and used the last two weekends of the course to go for the job interview and later to arrange housing for his family in his new community. He sent a letter withdrawing from the course and requesting information about the possibility of completing the course in Calgary next year as his new position is close to that city.

The Course

Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985) is a course developed for the University of South Florida and packaged by Performance Learning Systems of New Jersey and sponsored in Alberta by the Alberta Teachers' Association. It consists of a selection of modules on research-based effective teaching techniques and a selection of information on how to coach based largely on the work of Bruce Joyce and Beverly Showers. The effective teaching technique modules are all selected from other Performance Learning System courses and instructors of this course are instructors of the other courses. The Coaching course is designed to be offered in any of several formats all of which include thirty-six hours of classroom instruction and practice and a number of assignments for completion in the participant's own situation. These include:

1. One three hour session each week for twelve weeks,
2. Six six hour day-long sessions spread over three weeks,
3. Four nine hour weekend sessions, or
4. Thirty-six hours of instruction in one week.

and:

1. administrator/coach trainees only who practice in class with one another and in their own job situations with other staff members as they choose, or
2. administrator and teacher pairs who practice with one another in class and attempt to put their learning to effect back in their schools.

Research has shown that inservice training is most effective when it is spread over an extended period of time (Sparks, 1983, 66). Also, the common sense saying "practice what you preach" seems to lend credence to offering the course to administrator/teacher pairs. Using pairs who report on their progress at the next session is also a good way to ensure that the skills are practiced and internalized to the fullest. For these reasons the instructor suggested the course be held over the longest possible time span, in the shortest possible segments, and with administrator-teacher pairs. However, the board, which was funding the course, preferred to fund administrators only. Also, because a major community event involving all of the schools in the central community of the Division throughout late February and early March, the schools and the administrators were already overbooked and unable to begin the course until April. Because of the exceptionally late timing in the year, the four weekend sessions were chosen.

Data Collection

The data collection consists of pre-test and post-test charts for sections one, two, and four, summaries of results for sections three, five, six, and seven, participant profiles, and log summaries. Complete results as received from participants are included.

The pre-test was administered to all participants in the course. The post-test and the interviews were administered to all except the one person who was forced to withdraw as noted above. One of the post-tests was returned incomplete. The respondent's designation as assistant principal had been removed and he did not complete the second section of the test as he was uncertain about his future plans.

Data Interpretation

Fifteen pre-tests and fourteen post-tests were separated into sections and with the aid of C. Prokop the Statistical Package of The Social Sciences (SPSSX) program of statistics was selected to examine the data for changes between pre-test and post-test. The open-ended sections of the tests were individually reviewed and analyzed such that changes between pre-test and post-test could be noted. Finally the participant logs were examined for signs of change and the profiles were examined to see if the beliefs of the participants about their own practices were evident in the test situation.

Summary

This chapter presented a description of the research design. The instrumentation, design of the tests, participants in the study, course background, data collection and data interpretation were discussed. Chapter Four will present the data as collected.

Chapter Four
Data Collection

This chapter consists of a collection of the data gathered from the course participants. The initial section of the chapter includes the results of the pre-test and post-test administered to the group. First is a series of fifty-seven tables showing the results of the questions about course content, formative work with teachers, and the priority given to instructional improvement by participants. The tables show the results of the total sample, and of the subgroups. At the beginning of the tables is a summary chart showing all of the items that registered change significant beyond 0.05 or 0.01. Following the tables is a summary of the participant responses to each of the four open-ended questions from the test: Observation Elements, Obstacles to the Role As Instructional Leader, Resistance Skills, and Teaching Activity Suggestions. Next is a profile of each participant based on the information provided in the interviews. Last is a summary of responses and comments made by participants on their logs throughout the course.

Significance Summary Chart: Tables 1 - 57
* = Significant to 0.05 ** = Significant to 0.01

Question:	1	2	3	4	5	6	7	8	9	10	11	12	2.1	2.2	2.3	2.4	2.5	2.6	3
Table:																			
1. Pre-test: Techniques																			
2. Pre-test: Formative																			
3. Pre-test: Improvement																			
4. Post-test: Techniques																			
5. Post-test: Formative																			
6. Post-test: Improvement			*		**	**	**	**	**	**	**	**							
7. Pre-post: Techniques													**	*	**	**	**	**	
8. Pre-post: Formative																			
9. Pre-post: Improvement																			
EXPERIENCE:					*		**	*		**									
10. 0-5 Pre-post:Tech.															*		*		
11. 0-5 Pre-post: Format.																			
12. 0-5 Pre-post: Improv.	*	*	*		*	*	**	**	**	**	**	**							
13. 6+ Pre-post: Tech.													*			*	**		
14. 6+ Pre-post: Form.																			
15. 6+ Pre-post: Improv.																			
16. 0-5/6+ Pre-post: Tech.														*	*				
17. 0-5/6+ Pre-post: Form.																			
18. 0-5/6+ Pre-post: Impr.				*															
19. 0-5/6+ Post: Tech.																*	*		
20. 0-5/6+ Post: Form.																			
21. 0-5/6+ Post: Improv.																			
SCHOOL LEVEL:					**	*	**	**	**	**	**	**							
22. Elem. Pre-post: Tech.													*	*	**	**	**	*	
23. Elem. Pre-post: Form.																			
24. Elem. Pre-post: Impr.								*											
25. Sec. Pre-post: Tech.																			
26. Sec. Pre-post: Form.																			
27. Sec. Pre-post: Impr.																			

Summary Continued	1	2	3	4	5	6	7	8	9	10	11	12	2.1	2.2	2.3	2.4	2.5	2.6	3
28. E/S Pretest: Tech.																			
29. E/S Pretest: Form.																			
30. E/S Pretest: Impr.		*								*									
31. E/S Post-test: Tech.																			
32. E/S Post-test: Form																			
33. E/S Post-test: Impr.																			
EDUCATIONAL TRAINING					**	*	**	**	**	**	*	*							
34. Bach. Pre-post: Tech.													*	*	**	**	**	*	
35. Bach. Pre-post. Form.																			
36. Bach. Pre-post. Impr.								*		*									
37. M.+ Pre-post: Tech.																	*		
38. M.+ Pre-post: Form																			
39. M.+ Pre-post: Impr.																			
40. B/M+ Pretest: Tech.																			
41. B/M+ Pretest: Form.																			
42. B/M+ Pretest: Impr.																			
43. B/M+ Post-test: Tech.																*			
44. B/M+ Post-test: Form.																			*
45. B/M+ Post-test: Impr.																			
POSITION			*		*		*	**	**	**	*	**							
46. Prin. Pre-post: Tech.															*	*	**		
47. Prin. Pre-post: Form.																			
48. Prin. Pre-post: Impr.					**	*	*	**											
49. VP Pre-post: Tech.													**	**	**	**			
50. VP Pre-post: Form.																			
51. VP Pre-post: Impr.				*															
52. Prin/VP Pretest: Tech.																			
53. Prin/VP Pretest: Form.																			
54. Prin/VP Pretest: Imp.		*							*										
55. P/VP Post-test: Tech.																*			
56. P/VP Post-test: Form.																			
57. P/VP Post-test: Impr.																			

Table One
Pre-Test Results
Part One: Identification of

Teaching Techniques	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1. The use of a variety of levels of questions	3	2	5	1	5	3	4	3	4	3	4	3	3	5	3
2. The use of questions that are clear and understandable to the students	3	3	5	2	5	5	4	3	4	4	3	3	4	5	3
3. The use of pause periods in questioning	3	4	5	3	4	5	5	4	4	5	4	4	4	5	4
4. The appropriateness of teacher responses to student answers	3	3	5	3	3	4	4	4	3	3	4	4	4	5	3
5. The impact of teacher nonverbal behaviour on class momentum	3	2	4	3	2	4	4	2	3	2	3	4	3	2	3
6. The deliberate purposeful teacher use of nonverbal behaviours	2	2	5	2	1	3	3	2	3	3	3	4	4	1	2
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	2	2	3	2	4	3	3	0	3	1	0	3	3	4	3
8. The matching of KTAV strategies to students' learning styles	2	0	3	1	1	2	2	0	3	1	0	3	1	1	1

Table 1 (Continued) Pre-Test Results Part One: Identification of Teaching Techniques (Continued)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
9. The use of similarities and differences to build a context for a lesson	3	0	4	0	0	0	3	1	2	3	0	3	3	1	0
10. The use of labelling for new terms	2	0	3	1	1	0	3	1	2	2	0	2	1	1	0
11. The use of new material by students at a level that demonstrates understanding	3	1		1	3	0	3	3	1	3	1	2	3	3	1
12. The use of new material integrated with previously learned material	3	1	4	2	3	0	3	2	1	2	4	2	4	3	2

Table Two
Pre-test Part Two:

Formative Work With Teachers	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
QUESTION: To what extent do you work formatively with teachers to accomplish the following: —															
1. identification of teacher strengths	3	2	0	4	3	4	4	1	3	1	4	4	4	1	0
2. identification of teacher weaknesses	3	2	0	2	3	4	3	1	3	2	4	4	4	1	2
3. identification of areas for instructional growth	3	2	0	2	4	3	4	1	3	1	4	4	3	1	2
4. the improvement of instruction in a specifically identified area	2	2	3	2	4	3	4	1	3	2	3	4	4	1	3
5. overcome resistance to change and the acceptance of new procedures	2	3	1	2	3	1	3	1	2	1	3	3	2	1	3
6. expansion of lesson design to include improved instructional techniques	3	1	0	3	4	3	4	1	3	2	2	4	3	1	3

Table 3 Pre-Test Part Three Instructional Improvement	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	5	1	4	3	5	5	5	5	4	4	4	4	5	3	4

Table 4 Post-Test Results Part One Identification of Teaching Techniques:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1. The use of a variety of levels of questions	4	4	5	4	5	4	4	4	4	3	4	4	4	4	
2. The use of questions that are clear and understandable to the students	4	5	5	4	5	5	4	5	4	2	4	5	4	5	
3. The use of pause periods in questioning	5	5	5	4	5	5	5	5	4	5	5	5	4	5	
4. The appropriateness of teache responses to student answers	4	4	5	4	4	4	4	4	3	3	4	5	4	3	
5. The impact of teacher nonverbal behaviour on class momentum	4	3	5	4	5	4	4	4	4	3	5	5	3	4	
6. The deliberate purposeful teacher use of nonverbal behaviours	3	3	5	4		3	4	5	4	4	5	5	4	4	
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	4	4	5	5	5	4	4	4	4	3	5	5	4	5	
8. The matching of KTAV strategies to students' learning styles	4	3	4	3	5	4	4	3	4	3	4	4	4	4	

Table 4 (Continued) Post-Test Results Part One (Continued) Identification of Teaching Techniques	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
9. The use of similarities and differences to build a context for a lesson.	3	4	5	4	5	4	4	4	4	3	4	4	4	5	
10. The use of labellig for new terms.	3	4	5	5	5	4	4	4	4	3	4	4	3	5	
11. The use of new material by students at a level that demonstrates understanding.	4	3	5	3	4	4	5	4	4	2	5	4	3	3	
12. The use of new material integrated with previously learned material.	4	3	5	3	4	3	4	4	4	2	5	4	4	4	

*Participant "O" withdrew from the course before completion.

Table 5
Post-Test: Part Two

Formative Work With Teachers	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
QUESTION: To what extent are you able to work formatively with teachers to accomplish the following:															
1. identification of teacher strengths	4	4	5	5	3	4	4	3	4		5	5	4	5	
2. identification of teacher weaknesses	4	4	5	3	2	4	3	3	4		5	4	3	2	
3. identification of areas for instructional growth	4	4	5	3	4	3	4	4	4		5	5	3	3	
4. the improvement of instruction in a specifically identified area	3	4	5	3	4	4	5	4	4		4	5	4	4	
5. overcome resistance to change and the acceptance of new procedures	3	4	5	2	4	3	4	4	4		5	5	3	3	
6. expansion of lesson design to include improved instructional techniques	4	4	5	3	3	4	4	3	4		4	5	3	4	

Table 6
Post-Test: Part Three

Instructional Improvement	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	4	4	4	4	4	5	5	5	5	5	5	5	5	4	

Table 7
Total Sample
Pre-Test and Post-Test Comparison
Part One: Identification of Teaching Techniques

		Pre- Test		Post- Test				
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	sig.
1. The use of a variety of levels of questions	14	3.43	1.16	4.00	0.39	-1.96	0.07	
2. The use of questions that are clear and understandable to the students	14	3.79	0.98	4.29	0.83	-1.53	0.15	
3. The use of pause periods in questioning	14	4.21	0.70	4.71	0.47	-2.46	0.03	*
4. The appropriateness of teacher responses to student answers	14	3.71	0.73	3.86	0.54	-0.62	0.55	
5. The impact of teacher nonverbal behaviour on class momentum	14	2.93	0.83	4.00	0.68	-4.73	0.00	**
6. The deliberate purposeful teacher use of nonverbal behaviours	13	2.85	1.07	4.00	0.71	-3.64	0.00	**
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	14	2.36	1.28	4.36	0.63	-6.03	0.00	**
8. The matching of KTAV strategies to students' learning styles	14	1.43	1.09	3.71	0.61	-7.51	0.00	**

*= Significant to 0.05
**= Significant to 0.01

Table 7 (Continued) Pre-Test and Post-Test Comparison Total Sample : Part One (Continued) Identification of Teaching Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	sig.
9. The use of similarities and differences to build a context for a lesson	14	1.64	1.50	4.00	0.56	-4.84	0.00	**
10. The use of labelling for new terms	14	1.36	1.01	4.07	0.73	-8.02	0.00	**
11. The use of new material by students at a level that demonstrates understanding	13	2.08	1.12	3.69	0.86	-3.88	0.00	**
12. The use of new material integrated with previously learned material	14	2.43	1.22	3.64	0.75	-4.05	0.00	**

*= Significant to 0.05

**= Significant to 0.01

Table 8

Total Sample Pre-Test and Post Test Comparison	N	Pre- Mean	Test Std. dev.	Post- Mean	Test Std. Dev.	t	Prob.	Sig.
Part Two - Formative Work With Teachers								
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	13	2.85	1.41	4.23	0.73	3.21	0.01	**
2. identification of teacher weaknesses	13	2.62	1.33	3.38	0.87	-2.38	0.04	*
3. identification of areas for instructional growth	13	2.62	1.33	3.77	0.73	-3.89	0.00	**
4. the improvement of instruction in a specifically identified area	13	2.77	1.09	3.92	0.64	-4.21	0.00	**
5. overcome resistance to change and the acceptance of new procedures	13	2.08	0.86	3.54	0.97	-6.79	0.00	**
6. expansion of lesson design to include improved instructional techniques	13	2.46	1.33	3.69	0.63	-3.41	0.01	**

*= Significant to 0.05

**= Significant to 0.01

Table 9
Total Sample
Pre-Test and Post Test Comparison
Instructional Improvement:

	N	Pre- Mean	Test Std. dev.	Post- Mean	Test Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	14	4.07	1.14	4.57	0.51	-1.84	0.09	

Table 10
Comparison: Pre-Test and Post-Test
0-5 Years Admin Experience

		Pre- Test		Post- Test				
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	sig.
Part One: Identification of Teaching Techniques								
1. The use of a variety of levels of questions	6	3.50	1.52	3.83	0.41	-0.54	0.61	
2. The use of questions that are clear and understandable to the students	6	3.38	1.17	3.83	0.98	0.00	1.00	
3. The use of pause periods in questioning	6	4.17	0.98	4.50	0.55	-0.79	0.47	
4. The appropriateness of teacher responses to student answers	6	3.67	1.03	3.50	0.55	0.35	0.74	
5. The impact of teacher nonverbal behaviour on class momentum	6	2.83	0.75	3.83	0.41	-3.87	0.01	*
6. the deliberate purposeful teacher use of nonverbal behaviours	6	2.67	1.37	3.83	0.41	-2.15	0.08	
7. the varied use of kinisthetic -tactual, auditory and visual teaching strategies	6	2.50	1.05	4.33	0.82	-5.97	0.00	**
8. The matching of KTAV strategies to students' learning styles	6	1.83	0.98	3.50	0.55	-3.95	0.01	*
				* =	Significant to	0.05		
				** =	Significant to	0.01		

Table 10.
Comparison: Pre-Test and Post-Test
0-5 Years Administrative Experience
Part One: Identification of Teaching Techniques (Continued)

	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	
9. The use of similarities and differences to build a context for a lesson	6	2.17	1.47	3.83	0.31	-2.08	0.09	
10. The use of labelling for new terms	6	1.83	0.75	4.17	0.98	-4.18	0.01	**
11. The use of new material by students at a level that demonstrates understanding	5	2.20	1.10	3.20	0.84	-1.41	0.23	
12. the use of new material integrated with previously learned material	6	2.50	1.05	3.33	0.82	-1.54	0.19	

*= Significant to 0.05
**= Significant to 0.01

Table 11.
Pre-Test and Post Test Comparison
0-5 Years Administrative Experience
Part Two - Formative Work
With Teachers

QUESTION: To what extent do you work formatively with teachers to accomplish the following:	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
1. identification of teacher strengths	5	2.20	1.64	4.60	0.55	-2.75	0.05	
2. identification of teacher weaknesses	5	1.80	1.30	3.20	0.84	-3.50	0.03	
3. identification of areas for instructional growth	5	1.80	1.30	3.40	0.55	-4.00	0.02	*
4. the improvement of instruction in a specifically identified area	5	2.20	0.84	3.40	0.55	-2.45	0.07	
5. overcome resistance to change and the acceptance of new procedures	5	1.60	0.55	2.80	0.84	-3.21	0.03	*
6. expansion of lesson design to include improved instructional techniques	5	2.00	1.41	3.60	0.55	-2.67	0.06	

*= Significant to 0.05
**= Significant to 0.01

Table 12 0-5 Years Admin. Experience Post-Test Part Three Instructional Improvement	N	Group 0-5 Mean	One Years Std. Dev.	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	6	3.83	0.75	4.33	0.52	-1.46	0.20	
				* =	Significant to	0.05		
				** =	Significant to	0.01		

Table 13
Comparison: Pre-Test and Post-Test
6+ Years Admin Experience
Part One: Identification of Teaching Techniques

Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	sig.
1. The use of a variety of levels of questions	8	3.38	0.92	4.13	0.35	-3.00	0.02	*
2. The use of questions that are clear and understandable to the students	8	3.75	0.89	4.63	0.52	-2.50	0.04	*
3. The use of pause periods in questioning	8	4.25	0.46	4.88	0.35	-3.42	0.01	*
4. The appropriateness of teacher responses to student answers	8	3.75	0.46	4.13	0.35	-2.05	0.08	
5. The impact of teacher nonverbal behaviour on class momentum	8	3.00	0.93	4.13	0.84	-2.83	0.03	*
6. The deliberate purposeful teacher use of nonverbal behaviours	7	3.00	0.82	4.14	0.90	-2.83	0.03	*
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	8	2.25	1.49	4.38	0.52	-3.87	0.01	**
8. The matching of KTAV strategies to students' learning styles	8	1.13	1.13	3.88	0.64	-7.51	0.00	**

*= Significant to 0.05
**= Significant to 0.01

Table 13 (Continued)
Comparison: Pre-Test and Post-Test
6+ Years Administrative Experience

Identification of Teaching Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	
9. The use of similarities and differences to build a context for a lesson	8	1.25	1.49	4.13	0.35	-4.95	0.00	**
10. The use of labelling for new terms	8	1.00	1.07	4.00	0.54	-7.10	0.00	**
11. The use of new material by students at a level that demonstrates understanding	8	2.00	1.20	4.00	0.76	-4.00	0.01	**
12. The use of new material integrated with previously learned material	8	2.38	1.41	3.88	0.64	-4.58	0.00	**

*= Significant to 0.05
**= Significant to 0.01

Table 14
6+ Years Administrative Experience
Pre-Test and Post Test Comparison

Part Two - Formative Work With Teachers	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	8	3.25	1.17	4.00	0.77	-2.39	0.05	*
2. identification of teacher weaknesses	8	3.13	1.13	3.50	0.93	-0.89	0.40	
3. identification of areas for instructional growth	8	3.13	1.13	4.00	0.76	-2.20	0.06	
4. the improvement of instruction in a specifically identified area	8	3.13	1.13	4.25	0.46	-3.21	0.02	*
5. overcome resistance to change and the acceptance of new procedures	8	2.38	0.92	4.00	0.76	-6.18	0.00	**
6. expansion of lesson design to include improved instructional techniques	8	2.75	1.28	3.75	0.71	-2.16	0.07	

*= Significant to 0.05
**= Significant to 0.01

Table 15
6+ Years Administrative Experience
Pre-Post Test Part Three
Instructional Improvement

	N	Pre- Mean	Test Std. Dev.	Post Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	8	4.25	1.39	4.75	0.46	-1.18	0.28	

* = Significant to 0.05
** = Significant to 0.01

Table 16
Administrative Experience
Pre-Test: Part One

Identification of Teaching Techniques	N	Group One 0-5 Years Mean	Group One 0-5 Years Std. Dev.	N	Group Two 6 + Years Mean	Group Two 6 + Years Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	7	3.43	1.40	8	3.38	0.92	0.09	0.93	
2. The use of questions that are clear and understandable to the students	7	3.71	1.11	8	3.75	0.89	-0.07	0.95	
3. The use of pause periods in questioning	7	4.14	0.90	8	4.25	0.46	-0.30	0.77	
4. The appropriateness of teacher responses to student answers	7	3.57	0.98	8	3.75	0.46	-0.46	0.65	
5. The impact of teacher nonverbal behaviour on class momentum	7	2.86	0.69	8	3.00	0.93	-0.33	0.74	
6. The deliberate purposeful teacher use of nonverbal behaviours	7	2.57	1.27	8	2.75	1.04	-0.30	0.77	
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	7	2.57	0.98	8	2.25	1.49	0.49	0.64	
8. The matching of KTAV strategies to students' learning styles	7	1.71	0.95	8	1.13	1.13	1.09	0.30	

*= Significant to 0.05 ** = Significant to 0.01

Table 16 (Continued)
Administrative Experience
Pre-Test: Part One (Continued)

Identification of Teaching Techniques	Group 1 0-5 Years N	Mean	Std. Dev.	Group 2 6 + Years N	Mean	Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	7	1.86	1.57	8	1.25	1.49	0.77	0.46	
10. The use of labelling for new terms	7	1.57	0.98	8	1.00	1.07	1.07	0.30	
11. The use of new material by students at a level that demonstrates understanding	6	2.00	1.10	8	2.00	1.20	0.00	1.00	
12. The use of new material integrated with previously learned material	7	2.43	0.98	8	2.38	1.41	0.08	0.93	

*= Significant to 0.05
**= Significant to 0.01

Table 17
Administrative Experience
Pre-Test: Part Two
Formative Work With Teachers

	N	Group 0-5 Mean	One Years Std. Dev.	N	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	7	1.71	1.60	8	3.25	1.17	-2.14	0.05	
2. identification of teacher weaknesses	7	1.86	1.07	8	3.13	1.13	-2.23	0.04	*
3. identification of areas for instructional growth	7	1.71	1.11	8	3.13	1.13	-2.43	0.03	*
4. the improvement of instruction in a specifically identified area	7	2.29	0.76	8	3.13	1.13	-1.67	0.12	
5. overcome resistance to change and the acceptance of new procedures	7	1.71	0.76	8	2.38	0.92	-1.51	0.16	
6. expansion of lesson design to include improved instructional techniques	7	2.14	1.22	8	2.75	1.28	-0.94	0.37	

*= Significant to 0.05
**= Significant to 0.01

Table 18

Administrative Experience Pre-Test: Part Three Instructional Improvement	N	Group 0-5 Mean	One Years Std. Dev.	N	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	7	3.86	0.69	8	4.25	1.39	-0.68	0.51	

Table 19 Administrative Experience Post-Test: Part One Identification of Teaching Techniques		Group 0-5 Mean	One Years Std. Dev.	N	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	6	3.83	0.41	8	4.13	0.35	-1.43	0.18	
2. The use of questions that are clear and understandable to the students	6	3.83	0.98	8	4.63	0.52	-1.96	0.07	
3. The use of pause periods in questioning	6	4.50	0.55	8	4.88	0.35	-1.56	0.15	
4. The appropriateness of teacher responses to student answers	6	3.50	0.55	8	4.13	0.35	-2.60	0.02	*
5. The impact of teacher nonverbal behaviour on class momentum	6	3.83	0.41	8	4.13	0.84	-0.78	0.45	
6. The deliberate purposeful teacher use of nonverbal behaviours	6	3.83	0.41	7	4.14	0.90	-0.77	0.46	
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	6	4.33	0.82	8	4.38	0.52	-0.12	0.91	
8. The matching of KTAV strategies to students' learning styles	6	3.50	0.55	8	3.88	0.64	-1.15	0.27	

*= Significant to 0.05 ** = Significant to 0.01

Table 19 (Continued) Administrative Experience Post-Test Part One (Continued) Identification of Teaching Techniques	N	Group 0-5 Mean	One Years Std. Dev.	N	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	6	3.83	0.75	8	4.13	0.35	-0.97	0.35	
10. The use of labelling for new terms	6	4.17	0.98	8	4.00	0.54	0.41	0.69	
11. The use of new material by students at a level that demonstrates understanding	6	3.17	0.75	8	4.00	0.76	-2.04	0.06	
12. The use of new material integrated with previously learned material	6	3.33	0.82	8	3.88	0.64	-1.39	0.19	

*= Significant to 0.05

**= Significant to 0.01

Table 20
Administrative Experience
Post-Test: Part Two
Formative Work With Teachers

	N	Group 0-5 Mean	One Years Std. Dev.	N	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	5	4.00	0.55	8	4.00	0.76	1.53	0.15	
2. identification of teacher weaknesses	5	3.20	0.84	8	3.50	0.93	-0.59	0.57	
3. identification of areas for instructional growth	5	3.40	0.55	8	4.00	0.76	-1.53	0.15	
4. the improvement of instruction in a specifically identified area	5	3.40	0.55	8	4.25	0.46	-3.01	0.01	*
5. overcome resistance to change and the acceptance of new procedures	5	2.80	0.84	8	4.00	0.76	-2.68	0.02	*
6. expansion of lesson design to include improved instructional techniques	5	3.60	0.55	8	3.75	0.71	-0.40	0.70	

*= Significant to 0.05
**= Significant to 0.01

Table 21

Administrative Experience Post-Test: Part Three Instructional Improvement:	N	Group 0-5 Mean	One Years Std. Dev.	N	Group 6 + Mean	Two Years Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	6	4.33	0.52	8	4.75	0.46	-1.59	0.14	

Table 22
Pre-Test and Post-Test Comparison
Elementary School Administrators
Part One: Identification of Teaching Techniques

		Pre- Test		Post- Test				
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	sig.
1. The use of a variety of levels of questions	11	3.45	1.29	4.09	0.30	-1.75	0.11	
2. The use of questions that are clear and understandable to the students	11	3.82	1.08	4.55	0.52	-2.19	0.05	
3. The use of pause periods in questioning	11	4.18	0.75	4.73	0.47	-2.21	0.05	
4. The appropriateness of teacher responses to student answers	11	3.73	0.79	3.91	0.54	-0.61	0.55	
5. The impact of teacher nonverbal behaviour on class momentum	11	3.00	0.89	4.09	0.54	-3.83	0.00	**
6. The deliberate purposeful teacher use of nonverbal behaviours	10	2.70	1.16	3.90	0.74	-3.09	0.01	*
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	11	2.64	1.12	4.45	0.52	-6.14	0.00	**
8. The matching of KTAV strategies to students'. learning styles	11	1.64	1.12	3.73	0.65	-6.10	0.00	**

* = Significant to 0.05
** = Significant to 0.01

Table 22 (Continued) Elementary School Administrators Comparison: Pre-Test and Post-Test Part One (Continued): Identification of Teaching Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	sig.
9. The use of similarities and differences to build a context for a lesson	11	1.55	1.51	4.09	0.54	-4.67	0.00	**
10. The use of labelling for new terms	11	1.45	1.04	4.27	0.65	-7.47	0.00	**
11. The use of new material by students at a level that demonstrates understanding	10	2.00	1.55	3.80	0.63	-5.01	0.00	**
12.The use of new material integrated with previously learned material	11	2.18	1.17	3.64	0.51	-4.28	0.00	**

*= Significant to 0.05
**= Significant to 0.01

Table 23 Elementary School Administrators Pre-Test and Post Test Comparison Part Two - Formative Work With Teachers	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	11	2.64	1.43	4.18	0.75	-3.14	0.01	*
2. identification of teacher weaknesses	11	2.36	1.29	3.27	0.79	-2.65	0.02	*
3. identification of areas for instructional growth	11	2.45	1.37	3.73	0.65	-3.82	0.00	**
4. the improvement of instruction in a specifically identified area	11	2.64	1.12	3.91	0.70	-4.18	0.00	**
5. overcome resistance to change and the acceptance of new procedures	11	2.00	0.89	3.45	0.93	-5.88	0.00	**
6. expansion of lesson design to include improved instructional techniques	11	2.45	1.44	3.73	0.65	-3.13	0.01	*

*= Significant to 0.05

**= Significant to 0.01

Table 24

Elementary School Administrators Pre-Post Test Part Three Instructional Improvement	N	Pre-Mean	Test Std. Dev.	Post Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	11	4.00	1.27	4.45	0.52	-1.34	0.21	

* = Significant to 0.05
** = Significant to 0.01

Table 25
Pre-Test and Post-Test Comparison
Secondary School Administrators

Part One: Identification of Teaching Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	sig.
1. The use of a variety of levels of questions	3	3.33	0.58	3.67	0.58	-1.00	0.42	
2. The use of questions that are clear and understandable to the students	3	3.67	0.58	3.33	1.16	0.38	0.74	
3. The use of pause periods in questioning	3	4.33	0.58	4.67	0.58	-1.00	0.42	
4. The appropriateness of teacher responses to student answers	3	3.67	0.58	3.67	0.58	0.00	1.00	
5. The impact of teacher nonverbal behaviour on class momentum	3	2.67	0.58	3.67	1.16	-1.73	0.23	
6. the deliberate purposeful teacher use of nonverbal behaviours	3	3.33	0.58	4.33	0.58	-1.73	0.23	
7. the varied use of kinisthetic -tactual, auditory and visual teaching strategies	3	1.33	1.53	4.00	1.00	-2.22	0.16	
8. The matching of KTAV strategies to students' learning styles	3	0.67	0.58	3.67	0.58	-5.20	0.04	*

*= Significant to 0.05
**= Significant to 0.01

Table 25 (Continued) Secondary School Administrators Pre-Test and Post-Test Comparison Part One (Continued): Identification of Teaching Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	sig.
9. The use of similarities and differences to build a context for a lesson	3	2.00	1.73	3.67	0.58	-1.39	0.30	
10. The use of labelling for new terms	3	1.00	1.00	3.33	0.58	-2.65	0.12	
11. The use of new material by students at a level that demonstrates understanding	3	2.33	1.16	3.33	1.53	-0.65	0.58	
12.The use of new material integrated with previously learned material	3	3.33	1.55	3.67	1.53	-1.00	0.42	

*= Significant to 0.05
**= Significant to 0.01

Table 26 Secondary School Administrators Pre-Test and Post Test Comparison Part Two - Formative Work With Teachers	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	2	4.00	0.00	4.50	0.71	-1.00	0.50	
2. identification of teacher weaknesses	2	4.00	0.00	4.00	1.41	0.00	1.00	
3. identification of areas for instructional growth	2	3.50	0.71	4.00	1.41	-1.00	0.50	
4. the improvement of instruction in a specifically identified area	2	3.50	0.71	4.00	0.00	-1.00	0.50	
5. overcome resistance to change and the acceptance of new procedures	2	2.50	0.71	4.00	1.41	-3.00	0.21	
6. expansion of lesson design to include improved instructional techniques	2	2.50	0.71	3.50	0.71	-1.00	0.50	

*= Significant to 0.05

**= Significant to 0.01

Table 27 Secondary School Administrators Pre-Test Post-Test Comparison Part 3: Instructional Improvement	N	Pre-Mean	Test Std. Dev.	Post Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	3	4.33	0.58	5.00	0.00	-2.00	0.18	

* = Significant to 0.05
** = Significant to 0.01

Table 28
School Level of Administrator
Pre-Test: Part One

Identification of Teaching Techniques	N	Group One Elementary Mean	Group One Elementary Std. Dev.	N	Group Two Secondary Mean	Group Two Secondary Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	11	3.45	1.29	4	3.25	0.50	0.30	0.77	
2. The use of questions that are clear and understandable to the students	11	3.82	1.08	4	3.50	0.58	0.55	0.59	
3. The use of pause periods in questioning	11	4.18	0.75	4	4.25	0.50	-0.17	0.87	
4. The appropriateness of teacher responses to student answers	11	3.73	0.79	4	3.50	0.58	0.52	0.61	
5. The impact of teacher nonverbal behaviour on class momentum	11	3.00	0.89	4	2.75	0.50	0.52	0.61	
6. The deliberate purposeful teacher use of nonverbal behaviours	11	2.55	1.21	4	3.00	0.82	-0.69	0.51	
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	11	2.64	1.12	4	1.75	1.50	1.25	0.24	
8. The matching of KTAV strategies to students' learning styles	11	1.64	1.12	4	0.75	0.5	1.5	0.16	

*= Significant to 0.05 ** = Significant to 0.01

Table 28 (Continued)
School Level of Administrator
Pre-Test Part One (Cont.)

Teaching Technique Variables:	Group One Elementary			Group Two Secondary					
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	11	1.55	1.51	4	1.50	1.73	0.05	0.96	
10. The use of labelling for new terms	11	1.45	1.04	4	0.75	0.96	1.19	0.26	
11. The use of new material by students at a level that demonstrates understanding	10	2.00	1.16	4	2.00	1.16	0.00	1.00	
12. The use of new material integrated with previously learned material	11	2.18	1.17	4	3.00	1.16	-1.20	0.25	

*= Significant to 0.05
**= Significant to 0.01

Table 29
School Level of Administrator
Pre-Test Part Two
Formative Work With Teachers

		Group One Elementary			Group Two Secondary				
	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	11	2.64	1.43	4	2.25	2.06	0.41	0.69	
2. identification of teacher weaknesses	11	2.36	1.29	4	3.00	1.16	-0.87	0.40	
3. identification of areas for instructional growth	11	2.45	1.37	4	2.50	1.29	-0.06	0.96	
4. the improvement of instruction in a specifically identified area	11	2.64	1.12	4	3.00	0.82	-0.59	0.57	
5. overcome resistance to change and the acceptance of new procedures	11	2.00	0.89	4	2.25	0.96	-0.47	0.65	
6. expansion of lesson design to include improved instructional techniques	11	2.45	1.44	4	2.50	0.58	-0.06	0.95	

*= Significant to 0.05
**= Significant to 0.01

Table 30 School Level of Administrator Pre-Test: Part Three Instructional Improvement	N	Group One Elementary Mean	Std. dev.	N	Group Two Secondary Mean	Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	11	4.00	1.27	4	4.25	0.50	-0.38	0.71	
					*=	Significant to	0.05		
					**=	Significant to	0.01		

Table 31
School Level of Administrator
Post-Test: Part One
Identification of Teaching Techniques

		Group One Elementary			Group Two Secondary				
Identification of Teaching Techniques	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	11	4.09	0.30	3	3.67	0.58	1.80	0.10	
2. The use of questions that are clear and understandable to the students	11	4.46	0.52	3	3.33	1.55	2.78	0.02	*
3. The use of pause periods in questioning	11	4.73	0.47	3	4.67	0.58	0.19	0.85	
4. The appropriateness of teacher responses to student answers	11	3.91	0.54	3	3.67	0.58	0.68	0.51	
5. The impact of teacher nonverbal behaviour on class momentum	11	4.09	0.54	3	3.67	1.16	0.96	0.36	
6. The deliberate purposeful teacher use of nonverbal behaviours	10	3.90	0.74	3	4.33	0.58	-0.93	0.38	
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	11	4.45	0.52	3	4.00	1.00	1.11	0.29	
8. The matching of KTAV strategies to students' learning styles	11	3.73	0.65	3	3.67	0.58	0.15	0.89	

*= Significant to 0.05 **= Significant to 0.01

Table 31 (Continued)
School Level of Administrator
Post-Test: Part One (Continued)

	Group One			Group Two					
		Elementary			Secondary				
Teaching Technique Variables:	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	11	4.09	0.54	3	3.67	0.58	1.19	0.26	
10. The use of labelling for new terms	11	4.27	0.65	3	3.33	0.58	2.27	0.04	*
11. The use of new material by students at a level that demonstrates understanding	11	3.73	0.65	3	3.33	1.53	0.44	0.70	
12. The use of new material integrated with previously learned material	11	3.64	0.51	3	3.67	1.53	-0.03	0.98	

*= Significant to 0.05
**= Significant to 0.01

Table 32 School Level of Administrator Post-Test: Part Two		Group One Elementary			Group Two Secondary				
Formative Work With Teachers	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	11	4.18	0.75	2	4.50	0.71	-0.55	0.59	
2. identification of teacher weaknesses	11	3.27	0.79	2	4.00	1.41	-1.10	0.30	
3. identification of areas for instructional growth	11	3.73	0.65	2	4.00	1.41	-0.47	0.65	
4. the improvement of instruction in a specifically identified area	11	3.91	0.70	2	4.00	0.00	-0.18	0.86	
5. overcome resistance to change and the acceptance of new procedures	11	3.45	0.93	2	4.00	1.41	-0.72	0.49	
6. expansion of lesson design to include improved instructional techniques	11	3.73	0.65	2	3.50	0.71	0.45	0.66	
				*=		Significant to	0.05		
				**=		Significant to	0.01		

Table 33 School Level of Administrator Post-Test: Part Three	Group One Elementary			Group Two Secondary					
Instructional Improvement	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	11	4.45	0.52	3	5.00	0.00	-1.76	0.10	

Table 34
Bachelor Degree Only
Pre-Test and Post-Test Comparison
Part One: Identification of Teaching Techniques

		Pre- Test		Post- Test				
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	sig.
1. The use of a variety of levels of questions	10	3.50	1.35	4.00	0.47	-1.25	0.24	
2. The use of questions that are clear and understandable to the students	10	3.90	1.10	4.20	0.92	-0.76	0.47	
3. The use of pause periods in questioning	10	4.20	0.79	4.70	0.48	-1.86	0.10	
4. The appropriateness of teacher responses to student answers	10	3.60	0.84	3.70	0.48	-0.32	0.76	
5. The impact of teacher nonverbal behaviour on class momentum	10	2.80	0.79	4.00	0.67	-4.13	0.00	**
6. The deliberate purposeful teacher use of nonverbal behaviours	9	2.67	1.12	3.78	0.67	-2.86	0.02	*
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	10	2.40	1.27	4.40	0.70	-5.07	0.00	**
8. The matching of KTAV strategies to students' learning styles	10	1.40	1.08	3.70	0.68	-5.81	0.00	**

* = Significant to 0.05
** = Significant to 0.01

Table 34 (Continued)
Bachelor Degree Only
Pre-Test and Post-Test Comparison
Part One (Continued):
Identification of Teaching Techniques

		Pre-	Test	Post-	Test			
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	
9. The use of similarities and differences to build a context for a lesson	10	1.30	1.57	4.00	0.67	-4.26	0.00	**
10. The use of labelling for new terms	10	1.20	1.03	4.20	0.79	-7.12	0.00	**
11. The use of new material by students at a level that demonstrates understanding	9	1.78	1.20	3.56	0.88	-3.11	0.01	*
12. the use of new material integrated with previously learned material	10	2.30	1.34	3.50	0.85	-3.09	0.01	*

*= Significant to 0.05
**= Significant to 0.01

Table 35 Bachelor Degree Only Pre-Test and Post Test Comparison Part Two - Formative Work With Teachers	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	9	2.67	1.41	4.33	0.71	-2.89	0.02	*
2. identification of teacher weaknesses	9	2.44	1.33	3.44	1.01	-2.68	0.03	*
3. identification of areas for instructional growth	9	2.44	1.33	3.67	0.71	-3.77	0.01	**
4. the improvement of instruction in a specifically identified area	9	2.56	0.88	3.67	0.50	-3.59	0.01	**
5. overcome resistance to change and the acceptance of new procedures	9	2.00	0.87	3.33	1.00	-5.66	0.00	**
6. expansion of lesson design to include improved instructional techniques	9	2.22	1.30	3.67	0.50	-3.04	0.02	*

*= Significant to 0.05
**= Significant to 0.01

Table 36 Bachelor Degree Pre-Test and Post Test Comparison Instructional Improvement:	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	10	3.80	1.23	4.40	0.52	-1.62	0.14	

Table 37
Master's Degree or More Education
Pre-Test and Post-Test Comparison

Part One: Identification of Teaching Techniques	N	Pre-Mean	Test std. dev.	Post-Mean	Test std. dev.	t	prob.	Sig.
1. The use of a variety of levels of questions	4	3.25	0.50	4.00	0.00	-3.00	0.06	
2. The use of questions that are clear and understandable to the students	4	3.50	0.58	4.50	0.58	-1.73	0.18	
3. The use of pause periods in questioning	4	4.25	0.50	4.75	0.50	-1.73	0.18	
4. The appropriateness of teacher responses to student answers	4	4.00	0.00	4.25	0.50	-1.00	0.39	
5. The impact of teacher nonverbal behaviour on class momentum	4	3.25	0.96	4.00	0.82	-1.57	0.22	
6. The deliberate purposeful teacher use of nonverbal behaviours	4	3.25	0.96	4.50	0.58	-1.99	0.14	
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	4	2.25	1.50	4.25	0.50	-2.83	0.07	
8. The matching of KTAV strategies to students' learning styles	4	1.50	1.29	3.75	0.50	-4.70	0.02	*

* = Significant to 0.05
** = Significant to 0.01

Table 37 (Continued) Master's Degree or More Pre-Test and Post-Test Comparison Part One (Continued): Identification of Teaching Techniques	N	Pre- Mean	Test std. dev.	Post- Mean	Test std. dev.	t	prob.	sig.
9. The use of similarities and differences to build a context for a lesson	4	2.50	1.00	4.00	0.00	-3.00	0.06	
10. The use of labelling for new terms	4	1.75	0.96	3.75	0.50	-4.90	0.02	*
11. The use of new material by students at a level that demonstrates understanding	4	2.75	0.50	4.00	0.82	-2.61	0.08	
12. the use of new material integrated with previously learned material	4	2.75	0.96	4.00	0.00	-2.61	0.80	

*= Significant to 0.05
**= Significant to 0.01

Table 38 Master's Degree or More Pre-Test and Post Test Comparison Part Two - Formative Work With Teachers	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	4	3.25	1.50	4.00	0.82	-1.57	0.22	
2. identification of teacher weaknesses	4	3.00	1.41	3.25	0.50	-0.40	0.72	
3. identification of areas for instructional growth	4	3.00	1.41	4.00	0.82	-1.41	0.25	
4. the improvement of instruction in a specifically identified area	4	3.25	1.50	4.50	0.58	-1.99	0.14	
5. overcome resistance to change and the acceptance of new procedures	4	2.25	0.96	4.00	0.82	-3.66	0.04	*
6. expansion of lesson design to include improved instructional techniques	4	3.00	1.41	3.75	0.96	-1.57	0.22	
				*=	Significant to	0.05		
				**=	Significant to	0.01		

Table 39 Master's Degree or More Pre-Test and Post Test Comparison Instructional Improvement:	N	Pre- Mean	Test Std. dev.	Post- Mean	Test Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	4	4.75	0.50	5.00	0.00	-1.00	0.39	

Table 40
Administrator Educational Level
Pre-Test Part One

Identification of Teaching Techniques	N	Group One Bachelor Degree Mean	Group One Bachelor Degree Std. Dev.	N	Group Two Master's or More Mean	Group Two Master's or More Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	10	3.50	1.35	4	3.25	0.50	0.35	0.73	
2. The use of questions that are clear and understandable to the students	10	3.90	1.10	4	3.50	0.58	0.68	0.51	
3. The use of pause periods in questioning	10	4.20	0.79	4	4.25	0.50	-0.12	0.91	
4. The appropriateness of teacher responses to student answers	10	3.60	0.84	4	4.00	0.00	-0.93	0.37	
5. The impact of teacher nonverbal behaviour on class momentum	10	2.80	0.79	4	3.25	0.96	-0.91	0.38	
6. The deliberate purposeful teacher use of nonverbal behaviours	10	2.50	1.18	4	3.25	0.96	-1.12	0.28	
7. The varied use of kinisthetic -tactual, auditory and visual teaching strategies	10	2.40	1.27	4	2.25	1.50	0.19	0.85	
8. The matching of KTAV strategies to students' learning styles	10	1.40	1.08	4	1.5	1.291	-0.15	0.88	

*= Significant to 0.05 ** = Significant to 0.01

Table 40 (Continued) Administrator Educational Level Pre-Test: Part One (Continued) Identification ofTeaching Techniques	N	Group Bachelor Mean	One Degree Std. Dev.	N	Group Master's Mean	Two or more Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	10	1.30	1.57	4	2.50	1.00	-1.40	0.19	
10. The use of labelling for new terms	10	1.20	1.03	4	1.75	0.96	-0.92	0.38	
11. The use of new material by students at a level that demonstrates understanding	9	1.78	1.20	4	2.75	0.50	-1.53	0.15	
12. The use of new material integrated with previously learned material	10	2.30	1.34	4	0.96	-0.61	-0.61	0.56	

*= Significant to 0.05
**= Significant to 0.01

Table 41									
Administrator Educational Level		Group	One		Group	Two			
Pre-Test: Part Two		Bachelor	Degree		Master's	or more			
Formative Work With Teachers	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	10	2.50	1.43	4	3.25	1.50	-0.87	0.40	
2. identification of teacher weaknesses	10	2.40	1.27	4	3.00	1.41	-0.78	0.45	
3. identification of areas for instructional growth	10	2.30	1.34	4	3.00	1.41	-0.87	0.40	
4. the improvement of instruction in a specifically identified area	10	2.50	0.85	4	3.25	1.50	-1.21	0.25	
5. overcome resistance to change and the acceptance of new procedures	10	1.90	0.88	4	2.25	0.96	-0.66	0.52	
6. expansion of lesson design to include improved instructional techniques	10	2.20	1.23	4	3.00	1.41	-1.06	0.31	

*= Significant to 0.05
**= Significant to 0.01

Table 42
Administrator Educational Level
Pre-Test: Part Three
Instructional Improvement

	N	Group Elemen Mean	One tary Std. dev.	N	Group Secon Mean	Two dary Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	10	3.80	1.23	4	4.75	0.50	-1.47	0.17	

*= Significant to 0.05
**= Significant to 0.01

Table 43 Administrator Educational Level Post-Test: Part One Identification of Teaching Techniques	N	Group Bachelor Mean	One Degree Std. Dev.	N	Group Master's Mean	Two or More Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	10	4.00	0.47	4	4.00	0.00	0.00	1.00	
2. The use of questions that are clear and understandable to the students	10	4.20	0.92	4	4.50	0.58	-0.60	0.56	
3. The use of pause periods in questioning	10	4.70	0.48	4	4.75	0.50	-0.17	0.87	
4. The appropriateness of teacher responses to student answers	10	3.70	0.48	4	4.25	0.50	-1.91	0.08	
5. The impact of teacher nonverbal behaviour on class momentum	10	4.00	0.67	4	4.00	0.82	0.00	1.00	
6. The deliberate purposeful teacher use of nonverbal behaviours	9	3.78	0.67	4	4.50	0.58	-1.87	0.09	
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	10	4.40	0.70	4	4.25	0.50	0.39	0.71	
8. The matching of KTAV strategies to students' learning styles	10	3.70	0.68	4	3.75	0.50	-0.13	0.90	

*= Significant to 0.05 **= Significant to 0.01

Table 43 (Continued) Administrator Educational Level Post-Test: Part One (Continued) Identification ofTeaching Techniques	N	Group Bachelor Mean	One Degree Std. Dev.	N	Group Master's Mean	Two or more Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	10	4.00	0.67	4	4.00	0.00	0.00	1.00	
10. The use of labelling for new terms	10	4.20	0.79	4	3.75	0.50	1.05	0.32	
11. The use of new material by students at a level that demonstrates understanding	10	3.50	0.85	4	4.00	0.82	-1.00	0.34	
12. The use of new material integrated with previously learned material	10	3.50	0.85	4	4.00	0.00	-1.15	0.27	

*= Significant to 0.05
**= Significant to 0.01

Table 44 Administrator Educational Level Post-Test: Part Two Formative Work With Teachers		Group Bachelor One Degree			Group Master's Two or more				
	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	9	4.33	0.71	4	4.00	0.82	0.75	0.47	
2. identification of teacher weaknesses	9	3.44	1.01	4	3.25	0.50	0.36	0.73	
3. identification of areas for instructional growth	9	3.67	0.71	4	4.00	0.82	-0.75	0.47	
4. the improvement of instruction in a specifically identified area	9	3.67	0.50	4	4.50	0.58	-2.66	0.02	*
5. overcome resistance to change and the acceptance of new procedures	9	3.33	1.00	4	4.00	0.82	-1.16	0.27	
6. expansion of lesson design to include improved instructional techniques	9	3.67	0.50	4	3.75	0.96	-0.21	0.84	

*= Significant to 0.05
**= Significant to 0.01

Table 45
Administrator Educational Level
Post-Test Part Three
Instructional Improvement

	Group Bachelor	One Degree		Group Master's	Two or More				
	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	10	4.40	0.52	4	5.00	0.00	-2.27	0.04	*

*= Significant to 0.05
**= Significant to 0.01

Table 46 Principals Pre-Test and Post-Test Comparison Part One: Identification of Teaching Techniques		Pre- Test		Post- Test				
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	sig.
1. The use of a variety of levels of questions	7	3.57	1.13	4.14	0.38	-1.55	0.17	
2. The use of questions that are clear and understandable to the students	7	4.00	1.00	4.71	0.49	-1.99	0.09	
3. The use of pause periods in questioning	7	4.29	0.49	4.86	0.38	-2.83	0.03	*
4. The appropriateness of teacher responses to student answers	7	3.86	0.69	4.00	0.58	-0.35	0.74	
5. The impact of teacher nonverbal behaviour on class momentum	7	2.86	0.90	4.14	0.90	-3.06	0.02	*
6. The deliberate purposeful teacher use of nonverbal behaviours	6	2.83	1.17	4.00	0.89	-2.44	0.06	
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	7	2.71	1.38	4.57	0.54	-3.36	0.02	*
8. The matching of KTAV strategies to students' learning styles	7	1.14	1.07	4.00	0.58	-7.07	0.00	**

*= Significant to 0.05

**= Significant to 0.01

Table 46 (Part Two) Principals Comparison: Pre-Test and Post-Test Part One (Continued): Identification of Teaching Techniques		Pre- Test		Post- Test				
	N	Mean	std. dev.	Mean	std. dev.	t	prob.	sig.
9. The use of similarities and differences to build a context for a lesson	7	1.00	1.41	4.29	0.49	-5.42	0.00	**
10. The use of labelling for new terms	7	0.71	0.76	4.14	0.69	-9.30	0.00	**
11. The use of new material by students at a level that demonstrates understanding	7	1.86	1.22	3.71	0.76	-2.93	0.03	*
12. The use of new material integrated with previously learned material	7	2.43	1.51	3.86	0.69	-3.87	0.01	**

* = Significant to 0.05
**= Significant to 0.01

Table 47 Principals Pre-Test and Post Test Comparison Part Two - Formative Work With Teachers	N	Pre- Test Mean	Pre- Test Std. dev.	Post- Test Mean	Post- Test Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	7	3.14	1.22	4.29	0.76	-2.07	0.08	
2. identification of teacher weaknesses	7	3.14	1.22	3.43	1.13	-0.68	0.52	
3. Identification of areas for instructional growth	7	3.00	1.16	3.86	0.90	-2.52	0.05	*
4. the improvement of instruction in a specifically identified area	7	3.00	1.16	4.14	0.38	-2.83	0.03	*
5. overcome resistance to change and the acceptance of new procedures	7	2.29	0.95	3.86	0.90	-7.78	0.00	**
6. expansion of lesson design to include improved instructional techniques	7	2.57	1.27	3.86	0.69	-2.27	0.06	

*= Significant to 0.05
**= Significant to 0.01

Table 48 Principals Pre-Test and Post Test Comparison Part Three Instructional Improvement:	N	Pre-Mean	Test Std. dev.	Post-Mean	Test Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	7	3.86	1.46	4.57	0.54	-1.51	0.18	
				*=	Significant to	0.05		
				**=	Significant to	0.01		

Table 49 Vice-Principals Pre-Test and Post-Test Comparison Part One: Identification of Teaching Techniques		Pre- Test		Post- Test			
	N	Mean	std. dev.	Mean	std. dev.	t	prob.
1. The use of a variety of levels of questions	4	2.75	1.26	3.75	0.50	-1.41	0.25
2. The use of questions that are clear and understandable to the students	4	3.25	0.96	3.50	1.00	-0.29	0.79
3. The use of pause periods in questioning	4	3.75	0.96	4.50	0.58	-1.57	0.22
4. The appropriateness of teacher responses to student answers	4	3.00	0.00	3.50	0.58	-1.73	0.18
5. The impact of teacher nonverbal behaviour on class momentum	4	2.75	0.50	3.75	0.50	-99.00	0.00 **
6. The deliberate purposeful teacher use of nonverbal behaviours	4	2.5	0.58	3.75	0.5	-5	0.02 *
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	4	2	0.82	4	0.82	-4.9	0.02 *
8. The matching of KTAV strategies to students' learning styles	4	1.75	0.96	3.5	0.58	-7	0.01 **

* = Significant to 0.05

** = Significant to 0.01

Table 49 (Continued)
Vice-Principals
Comparison: Pre-Test and Post-Test

Part One (Continued): Identification ofTeaching Techniques	N	Pre- Test Mean	Pre- Test std. dev.	Post- Test Mean	Post- Test std. dev.	t	prob.	sig.
9. The use of similarities and differences to build a context for a lesson	4	2	1.41	3.5	0.58	-1.57	0.22	
10. The use of labelling for new terms	4	1.75	0.5	3.75	0.96	-2.83	0.07	
11. The use of new material by students at a level that demonstrates understanding	4	2.00	1.16	3.25	0.96	-1.46	0.24	
12. The use of new material integrated with previously learned material	4	2.00	0.82	3.25	0.96	-1.99	0.14	

*= Significant to 0.05
**= Significant to 0.01

Table 50 Vice-Principals Pre-Test and Post Test Comparison Part Two - Formative Work With Teachers	N	Pre- Test Mean	Pre- Test Std. dev.	Post- Test Mean	Post- Test Std. Dev.	t	Prob.	
QUESTION: To what extent do you work formatively with teachers to accomplish the following:								
1. identification of teacher strengths	3	3.33	0.58	4.33	0.58	-99.00	0.00	**
2. identification of teacher weaknesses	3	2.67	0.58	3.67	0.58	-99.00	0.00	**
3. identification of areas for instructional growth	3	2.67	0.58	3.67	0.58	-99.00	0.00	**
4. the improvement of instruction in a specifically identified area	3	2.33	0.58	3.33	0.58	-99.00	0.00	**
5. overcome resistance to change and the acceptance of new procedures	3	2.00	0.00	3.00	1.00	-1.73	0.23	
6. expansion of lesson design to include improved instructional techniques	3	3.00	0.00	3.67	0.58	-2.00	0.18	

*= Significant to 0.05

**= Significant to 0.01

Table 51 Vice-Principals Pre-Test and Post-Test Comparison Part 3: Instructional Improvement:	N	Pre- Test Mean	Pre- Test Std. dev.	Post- Test Mean	Post- Test Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	4	4.00	0.82	4.50	0.58	-1.00	0.39	
				*=	Significant to	0.05		
				**=	Significant to	0.01		

Table 52 Administrative Position Pre-Test: Part One	Group 1 Principals			Group Two Vice-Principals					
Identification of Teaching Techniques	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	7	3.52	1.13	5	2.80	1.10	1.18	0.27	
2. The use of questions that are clear and understandable to the students	7	4.00	1.00	5	3.20	0.84	1.46	0.18	
3. The use of pause periods in questioning	7	4.29	0.49	5	3.80	0.84	1.28	0.23	
4. The appropriateness of teacher responses to student answers	7	3.86	0.69	5	3.00	0.00	2.74	0.02	*
5. The impact of teacher nonverbal behaviour on class momentum	7	2.86	0.90	5	2.80	0.45	0.13	0.90	
6. the deliberate purposeful teacher use of nonverbal behaviours	7	2.57	1.27	5	2.40	0.55	0.28	0.79	
7. the varied use of kinisthetic -tactual, auditory and visual teaching strategies	7	2.71	1.38	5	2.20	0.84	0.74	0.48	
8. The matching of KTAV strategies to students' learning styles	7	1.14	1.07	5	1.6	0.894	-0.78	0.45	

*= Significant to 0.05 ** = Significant to 0.01

Table 52 (Continued) Administrative Position Pre-Test Part One (Continued): Identification of Teaching Techniques		Group One Principals			Group Two Vice-Principals				
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	7	1.00	1.41	5	1.60	1.52	-0.70	0.50	
10. The use of labelling for new terms	7	0.71	0.76	5	1.40	0.89	-1.44	0.18	
11. The use of new material by students at a level that demonstrates understanding	7	1.86	1.22	5	1.80	1.10	0.08	0.94	
12. The use of new material integrated with previously learned material	7	2.43	1.51	5	2.00	0.71	0.58	0.57	

*= Significant to 0.05

**= Significant to 0.01

Table 53 Pre-Test: Part Two Formative Work With Teachers		Principals			Vice- Principals				
	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	7	3.14	1.22	5	2.20	1.64	1.15	0.28	
2. identification of teacher weaknesses	7	3.14	1.22	5	2.40	0.55	1.27	0.24	
3. Identification of areas for instructional growth	7	3.00	1.16	5	2.20	0.84	1.31	0.22	
4. the improvement of instruction in a specifically identified area	7	3.00	1.16	5	2.40	0.55	1.07	0.31	
5. overcome resistance to change and the acceptance of new procedures	7	2.29	0.95	5	2.00	0.71	0.57	0.58	
6. expansion of lesson design to include improved instructional techniques	7	2.57	1.27	5	2.80	0.45	-0.38	0.71	

*= Significant to 0.05
**= Significant to 0.01

Table 54
Administrative Position
Pre-Test: Part Three
Part 3: Instructional Improvement

		Group One Princi pals			Group Two Vice-Principals				
	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	7	3.86	1.46	5	4.00	0.71	-0.20	0.85	

*= Significant to 0.05
**= Significant to 0.01

Table 55
Administrative Position
Post-Test: Part One

Identification of Teaching Techniques	Group 1 Principals N	Group 1 Principals Mean	Group 1 Principals Std. Dev.	Group Two Vice-Principals N	Group Two Vice-Principals Mean	Group Two Vice-Principals Std. Dev.	t	Prob.	Sig.
1. The use of a variety of levels of questions	7	4.14	0.38	4	3.75	0.50	1.48	0.17	
2. The use of questions that are clear and understandable to the students	7	4.71	0.49	4	3.50	1.00	2.76	0.02	*
3. The use of pause periods in questioning	7	4.86	0.38	4	4.50	0.58	1.25	0.24	
4. The appropriateness of teacher responses to student answers	7	4.00	0.58	4	3.50	0.58	1.38	0.20	
5. The impact of teacher nonverbal behaviour on class momentum	7	4.14	0.90	4	3.75	0.50	0.79	0.45	
6. The deliberate purposeful teacher use of nonverbal behaviours	6	4.00	0.89	4	3.75	0.50	0.50	0.63	
7. The varied use of kinisthetic-tactual, auditory and visual teaching strategies	7	4.57	0.54	4	4.00	0.82	1.42	0.19	
8. The matching of KTAV strategies to students' learning styles	7	4.00	0.58	4	3.50	0.58	1.38	0.20	

*= Significant to 0.05 **= Significant to 0.01

Table 55 (Continued) Administrative Position Post-Test Part One (Continued): Identification of Teaching Techniques	Group One Principals			Group Two Vice-Principals					
	N	Mean	Std. Dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
9. The use of similarities and differences to build a context for a lesson	7	4.29	0.49	4	3.5	0.58	2.41	0.04	*
10. The use of labelling for new terms	7	4.14	0.69	4	3.75	0.96	0.79	0.45	
11. The use of new material by students at a level that demonstrates understanding	7	3.71	0.76	4	3.25	0.96	0.89	0.4	
12. The use of new material integrated with previously learned material	7	3.86	0.69	4	3.25	0.96	1.23	0.25	

* = Significant to 0.05
**= Significant to 0.01

Table 56 Administrative Position Post-Test: Part Two Formative Work With Teachers	N	Group One Principals Mean	Group One Principals Std. dev.	N	Group Two Vice-Principals Mean	Group Two Vice-Principals Std. Dev.	t	Prob.	Sig.
QUESTION: To what extent do you work formatively with teachers to accomplish the following:									
1. identification of teacher strengths	7	4.29	0.76	3	4.33	0.58	-0.10	0.93	
2. identification of teacher weaknesses	7	3.43	1.13	3	3.67	0.58	-0.34	0.75	
3. Identification of areas for instructional growth	7	3.86	0.90	3	3.67	0.58	0.33	0.75	
4. the improvement of instruction in a specifically identified area	7	4.14	0.38	3	3.33	0.58	2.69	0.03	*
5. overcome resistance to change and the acceptance of new procedures	7	3.86	0.90	3	3.00	1.00	1.34	0.22	
6. expansion of lesson design to include improved instructional techniques	7	3.86	0.69	3	3.67	0.58	0.42	0.69	

*= Significant to 0.05

**= Significant to 0.01

Table 57									
Administrative Position		Group	One		Group	Two			
Post-Test: Part Three		Principals			Vice-Principals				
Part 3: Instructional Improvement	N	Mean	Std. dev.	N	Mean	Std. Dev.	t	Prob.	Sig.
Question: Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ?	7	4.57	0.54	4	4.50	0.58	0.21	0.84	
				*=	Significant to		0.05		
				**=	Significant to		0.01		

Question Three: Observation Elements

This question was included on the pre-test and post-test to determine if the participants' teacher observation practices would change as a result of this course. Participant responses are recorded as written on the test.

Question: As a practising administrator, you observe teachers at work and provide them with feedback on their performance. Please list up to three elements of teaching that you look for.

	Pre-test	Post-test
Andy Amherst		
	a. long range planning	a. questioning techniques including pause periods
	b. lesson organization	b. learning styles balance
	c. questioning	c. planning
Boris Barishnikov		
	a. planning	a. questioning techniques
	b. classroom relationship	b. identification of student learning styles
	c. motivation	c. accomodation of learning styles
Carla Cameron		
	a. objectives being met or focussed on	a. questioning skills
	b. "Dip sticking" - checking student comprehension	b. nonverbal messages
	c. classroom management	c. learning modalities

Denise Doherty

a. preparation	a. positive attitude
b. confidence	b. rapport with students
c. effectiveness	c. sound teaching methods

Edward Evans

a. teacher/student relationship	a. use of a variety of teaching styles
b. a variety of instructional approaches	b. questioning techniques
c. teacher/student and student/student interaction	c. use of non-verbals

Fred Foremost

a. Effective instructional strategies: - discussion, questioning, lesson format and presentation	a. classroom management and control strategies
b. Classroom management methods - handling difficult situations, conflict management	b. lesson structure - use of KTAV
c. Effective planning and organization of subject material. Knowledge of subject and innovation in planning.	c. questioning strategies and question modes

Gary Green

a. set induction	a. rapport with students/ students on task
b. student involvement in the learning process	b. questioning techniques
c. student feedback that demonstrates understanding	c. relevance of activities related to objectives

Harry Horner

a. planning	a. student/teacher rapport
b. teaching strategies	b. teaching strategies: KTAV, questioning techniques
c. teacher/student rapport	c. classroom management

Iona Innis

a. classroom management	a. planning and organization
b. classroom planning organization	b. classroom management
c. rapport with students	c. application of learning theories: time-on-task, learning styles, questioning techniques

James Jackson

a. ability to communicate concepts to students	a. eagerness, desire, rapport with students - Do they like what they do?
b. knowledge of content	b. classroom control
c. rapport with students	c. knowledge of subject

Kevin Kramer

a. student management- students on task	a. classroom control - student management
b. lesson organization	b. questioning techniques
	c. use of non-verbals

Larry Lewis

a. ability to deal with the specific while looking at the whole	a. enthusiasm
b. task analysis of students	b. learning modalities
c. frequency and type of student contact in a lesson	c. question techniques: pauses, etc

Michael Musselman

a. rapport with students - classroom climate	a. questioning techniques
b. lesson organization - the structure: clear intro., motivation, lesson practice, summary	b. learning modalities - KTAV
c. class control: discipline, routines	c. classroom management/ control

Ned Niederhaus

a. communication skills	a. evidence of planning - structure
b. preparation	b. questioning techniques - variety of modes, pauses, etc.
c. evaluation	c. nonverbals

Question Five: Obstacles to the Role as Instructional Leader

This question was included on the pre-test and post-test to see if the participants' perceptions of the constraints or obstacles would change as a result of taking the course. The responses are recorded as they were written on the test papers.

Question: Please list up to three constraints or obstacles to your role as instructional leader.

Pre-test	Post-test
Andy Amherst	
a. time (large teaching component to position)	a. time b. opportunity for continuing

	inservice

Boris Barishnikov

a. time constraints	a. time
b. lack of expertise	b. official role description
c. other factors demanding	c. present encouragement of
many visits	
immediate attention	to office for good work

Carla Cameron

a. negative teacher attitudes	a. time factor for both teacher and administrator
b. time constraints	
c. personal weak points in teaching	b. resistance of other teachers

Denise Doherty

a. time	a. heavy teaching assignment
b. paperwork	b. paperwork
c. self-confidence	c. probable resistance

Edward Evans

a. paperwork	a. administrivia
b. public relations demands	b. community/ central office
	c. frequent removal from school
c. lack of sufficient time	

Fred Foremost

a. time: many other lesser duties get in the way of the essentials	a. time with the wide variety of demands on administrators' time
b. divergence of needs in the school. One must put many "objectives" aside to concentrate on a few	
c. change - the speed of change in curriculum and educational	

thrusts

Gary Green	
a. being perceived as a summative evaluator	a. defensive nature of teachers
b. lack of understanding of events leading up to and following the lesson	b. long term committment to assistance
c. reluctance of people to change	c. infrequent contact resulting in poor rapport
Harry Horner	
a. other duties and tasks	a. time constraints with other duties
b. limited time	b. role is to work mainly with principals
c. require more skills in coaching	
Iona Innis	
a. tendency to be too straightforward - not phrasing the negative in a positive way	a. time
b. inexperience as an instructional leader	b. patience
c. time for feedback and assistance	c. tendency to concentrate on weaknesses
James Jackson	
a. limited role and experience in teacher evaluation	a. attitudinal roadblocks from staff and supervisors
b. limited knowledge of research based teaching strategies	b. time
c. Objectivity	c. lack of central office encouragement for improvement

Kevin Kramer

a. time	a. There are none and those I presume to exist are a figment of my imagination
b. my own inadequacies	

Larry Lewis

a. teacher inservice - are teachers where I'm at?	a. time
b. time	b. paperwork
c. politics in terms of community, inter/school, and ATA	c. people

Michael Musselman

a. teacher resistance to change	a. teacher insecurity/ complacency or apathy
b. personal biases and prejudices as to what constitutes effective teaching	b. personal lack of expertise/knowledge
c. teacher expectations (biases and prejudices) for a certain mode or style of leadership	c. teacher and personal attitudes, feelings and biases

Ned Niederhaus

a. lack of administration time	a. need to be on top of the best skills
b. lack of time for staff conferences	b. lack of opportunity for informal contacts Note: These are hard to dig for . . . the situation can and will be improved for next year.
c. lack of time to arrange resources for professional development	

Question Six: Resistance Skills

As the course teaches communication skills designed to help administrators successfully meet resistance, this question was designed to determine whether the participants were better prepared to meet resistance upon completion of the course.

Question: Imagine that you are meeting with an experienced teacher on a continuing contract to discuss the observations that you have made in his/her classroom. You have observed a weakness in questioning strategies.

6 a. Based on your experience in this or similar situations state the objections or resistances that you would expect to meet when you introduce this weakness into the discussion.

6 b. What can you do to overcome this resistance ?

a. Resistance	b. Skills to overcome
Andy Amherst	
Pre-test:	
1. Draw out the negative by accentuating the positive.	1. Dialogue 2. Model
Post-test:	

1. A resistance statement might be, "Student behaviour is getting worse these days. They have no respect for their elders."	1. Provide a positive example: i.e. the opportunity to observe respective behaviour in other settings.

Boris Barishnikov

Pre-test:

1. Predict a lack of response from the students to questions requiring greater depth of thought.	1. Point out that the more varied the technique, and the more frequent their use - the more rewarding the result.

Post-test:

1. Lack of knowledge of strategies.	1. Give a simplified system - i.e. a simpler question categorization system than Bloom's.
2. Lack of ability to put them into practice.	2. Model, or arrange for modelling of effective techniques.

Carla Cameron

Pre-test

1. The statement, "I've made it fine without that for this	1. Show the usefulness or the purposes of the skills.

long." may show a belief that change is not necessary.	Build from what he/she already uses.
	Post-test:
1. Frustration	1. Empathy statements
2. Pride	2. Approval/Support statements
Denise Doherty	
1. Sample statement: "The class becomes restless when I don't get to the point right away."	1. Point out more effective methods of questioning. - don't rush students - wait for a while for an answer
2. "I get foolish, smart alecky answers when I ask questions."	
Post-test:	
1. She may feel she is being appropriately criticized.	1. Accentuate the positive in aspects of her current teaching style.
2. She may feel she will lose control by using pauses.	2. Express confidence in her ability to make the changes or to try new ideas.
	3. Model a lesson.

Edward Evans

Pre-test:

1.	"I didn't know I had this problem."	1.	Encourage self-evaluation.
2.	"I have never been told this before."	2.	Encourage visits to other selected classrooms.

Post-test

1.	"This is the first time that anyone has ever told me that there is something wrong with my teaching in all the years I have been teaching."	1.	Work first with teacher strengths and then lead into ways the teacher could improve in this one area.
		2.	Provide specific observed example through the use of anecdotal records, video or audio tapes.
		3.	Provide a model.

Fred Foremost

Pre-test:

1.	This depends on the teacher. Sensitive teachers are hurt, confident teachers are defensive, etc. Most are apprehensive about	1.	Record observations with a script or some other objective data model. Proceed through a discussion of the data,

the discussion of weakness.	allowing the teacher to say, "Did I do that ?" etc. and then move to improve. If the teacher reaction does not occur, the data allows you to make a non-threatening observation or statement.
Post-test:	
1. The teacher will likely show emotional resistance.	1. Employ the conferencing skills from the course and use open-ended questions to draw the teacher to recognize the problem and to suggest remedies.
Gary Green	
Pre-test	
1. Unwillingness to talk about the weakness. 2. Teachers often rationalize why they are weak in a certain area.	1. Assure the teacher that it is acceptable to have some weaknesses. Help them accept the fact and be prepared to do something about it.

Post-test	
1. Pride	1. Use approval statements.
2. Emotions	2. Use empathy statements.
3. Intellect	3. Use support statements.
Harry Horner	
Pre-test:	
1. The teacher would likely defend the strategies he/she had used for a number of years.	1. Suggest another observation using an audio recording that the teacher could listen to by himself.
Post-test:	
1. "I have always done it this way and it works."	1. Have this teacher observe through audio or video taping his/her own strategies.
Iona Innis	
Pre-test:	
1. Intellect: "This type of lesson required this type of response - this isn't generally what you would see."	No answer given
2. Pride hurt or an emotional reaction.	
Post-test:	

1. Pride	1. Approval statements
2. Emotions	2. Empathy statements
3. Intellect	3. Support statements

James Jackson

Pre-test:

1. Denial: "I've been teaching for 20 years."	1. Empirical observations - use specific examples.
2. Concern regarding validity of the observation and/or competency of the evaluator.	2. Non-confrontational approach to discussion of the weakness. Usually teachers ask about the weaknesses. Its an expectation.

Post-test:

1. Anger	1. Empathy statement - However, the integrity of the observer must be established prior to the observation. This allows for freer discussion which gets you to the issue more quickly.
2. Suspicion	

Kevin Kramer

Pre-test:

1. None

Post-test::

1. The teacher may feel threatened, have hurt pride, anger. The teacher may feel that there are no weaknesses.	1. Use support statements to reassure the teacher that the basic job is good. 2. Coach them to recognize on their own that there can be improvement in some areas.

Larry Lewis

Pre-test:

1. "It was a hard day --all teachers found the kids bad. Therewas a weather change,...a full moon."	1. Exhibit data collected - ask how this may be improved.
2. "The kids were better yesterday, you should have seen ..."	2. Agree, come back at a time in the near future which is best for him/her.
3. "Why do you always drop in at the wrong time."	3. Focus on the good things stating that you will look at the other areas next time. Give/discuss some suggestions to help improve the area of weakness.

Post-test:

1. "The students were fine so it didn't matter."	1. Give examples of effective teaching strategy and ask if the teacher would like to try.
2. "This works for me."	2. Present the research.

Michael Musselman

Pre-test

1. "I've done this for years - It's been acceptable until now."	1. Cite a specific consequence that arose from a weak question. (Perhaps a student question that showed a lack of understanding.)
2. "My students do fine - I have no higher failure rates."	2. Be a mirror - recite the teacher's questions back asking for a teacher response/analysis
	3. Stress the strengths: Note how the weakness is one that can be remedied.

Post-test:

1. The teacher's pride may be at stake.	1. A supportive statement may alleviate the threat

	or fear a teacher may have.
Ned Niederhaus	
Pre-test:	
1. None - experienced teachers are more than willing to improve their instruction in my experience - if they are approached with tact.	No answer given
Post-test:	
1. Sample statement: "The children experience more success with memory questions - that's why I use so many of them.	1. Check out the pause times on a 3, 3, 5 second basis. 2. Offer to help demonstrate the other modes of questions, to help build them into a lesson - encourage and reinforce any success.

Question Seven: Teaching Activity Suggestions

This question was designed to see if, when faced with finding teaching suggestions for other teachers, the participants' thinking would reflect the teaching of the course. Both the KTAV - Learning Styles, and the SDLOC - Learning Process units from the course were expected to appear in the responses. Answers have been recorded as written on the test papers. The responses for this question have been classified into one of the three learning modalities taught during the course. This interpretation of the answers was done by the researcher after the test was completed. Ø indicates that the answer was unclear and classification was not possible.

Question: Suggest three activities that you might suggest to a teacher to help him/her teach **any three** of the following topics to a class:

1. desert plants	4. the feudal system
2. the growth of frogs	5. the Charter of Rights
3. area of a circle	6. double digit multiplication

Andy Amherst:

Pre-test:

No answers given.

Post-test:

1. desert plants: a. growth in a classroom KT

	b. graphing results	V
	c. National Geographic video	V
2. growth of frogs:	a. observation in aquarium	V
	b. regular trips to the frog pond	KT
	c. drawing of stages	KT/V
3. area of a circle:	a. use of graph paper	V
	b. relationship of pi and formula	0
	c. relationship to the radius - use of 'cut out' circles	KT
		4 KT, 0 A, 5 V

Boris Barishnikov

Pre-test:

1. desert plants:		
	a. audio-visual presentation of plants in their natural environment	V
	b. use of good reference books as a base for discussion	V/A
	c. provision of live samples in the classroom	KT
2. growth of frogs:		
	a. field trip to local pond	KT
	b. study of frogs gathered	KT
	c. observation of development - eggs to adult frog	V/KT
3. Charter of Rights:		

- a. study of Magna Carta — V
- b. develop an understanding of English Common Law 0
- c. discussion of pros and cons of Charter giving only those rights deemed rights by the government A

4 KT, 4 V, 2 A

Post-test:

1. desert plants:
    - a. bring samples into class V
    - b. use pictures and library visual aids V
    - c. use film on desert plants V
2. growth of frogs:
    - a. bring eggs to class for long-term study V
    - b. visit a local pond KT
    - c. show a film on growth stages V
3. feudal system:
    - a. role play baron/serf relationship KT
    - b. compare feudal and present day systems 0
    - c. explore needs then and now through library research V

2 KT, 0 A, 6 V

Carla Cameron

Pre-test:

1. desert plants:
    - a. plant a cactus garden. Examine soil and types of plants. KT
    - b. compare similarities and differences desert plants to our native plants. V
    - c. disect and label parts and their uses KT
2. growth of frogs:
    - a. field trip to a pond KT
    - b. present life cycle to students using visual aids V
    - c. Use the library for students to prepare a more detailed presentation to include drawings. V/KT
3. feudal system:
    - a. set up a mock system in class KT
    - b. read a history text and list advantages and disadvantages V
    - c. discuss possibilities and debate A

5 KT, 5

V, 1 A

Post-test:

1. desert plants:
    - a. plant and grow plants KT
    - b. lecture A

- c. use visual aids and real plants to add to the lecture V

2. growth of frogs:
    - a. raise tadpoles KT
    - b. chart growth changes in frogs V
    - c. answer questions re growth of frogs A
3. feudal system:
    - a. watch a film V
    - b. listen to a conversation between a feudal lord and a worker. Discuss. A
    - c. act out a portion of a day in a feudal system. Emphasize feelings. KT

3 KT, 3 V, 3 A

Denise Doherty

Pre-test:

1. desert plants:
    - a. show and tell activity, bring a cactus plant to school KT
    - b. research your plant to share the information with others V/KT
    - c. choose one cactus plant and list its uses V
2. growth of frogs:
    - a. invite students to catch and bring tadpoles to school KT

  - b. observe the growth of tadpoles and frogs V
  - c. read to discover what happened and to understand the term "amphibian" V

3. double digit multiplication:
  - a. fun worksheet on single digit addition to determine readiness KT/V
  - b. class participation in a search for ways to multiply in two digits A/KT
  - c. one child who knows the method can help another KT

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6 KT, 1 A, 5 V

Post-test:

1. desert plants:
  - a. have children bring cactus from home KT
  - b. have children research and share information on one of the plants V/KT
  - c. show a film on desert plants V
2. growth of frogs:
  - a. have a committee catch tadpoles for the aquarium KT
  - b. Observe and record the growth V
  - c. Read a science text to determine why

frogs are labelled amphibians	V
3. double digit multiplication:	
a. use 100's, 10's, 1's charts to review number breakdown	V
b. use the blackboard to give examples of the method to use	V
c. invite students to try 3, then correct together, work individually with students having trouble.	KT
	4 KT, 0 A, 7 V

Edward Evans

Pre-test:

1. desert plants:	
a. have students bring plants for observation and discussion	KT
b. set up a desert terrarium	V
c. View suitable films/filmstrips	V
2. growth of frogs:	
a. collect frog eggs and set up for observation	KT/V
b. collect pictures of stages of development. Have students put them in sequence.	V

    c. have students draw pictures of each stage. V/KT

3. feudal system:
    a. show suitable films V
    b. role play, followed by discussion KT
    c. have students verbalize or their personal reaction to the system. KT

5 KT, 0 A, 6 V

Post-test

1. desert plants:
    a. set up a display in the classroom V
    b. use films, filmstrips V
    c. read selected materials V
2. growth of frogs:
    a. set up a classroom "pond" V/KT
    b. read information from selected books V
    c. use a series of pictures depicting growth stages V
3. feudal system:
    a. acting, dramatization KT
    b. view films, filmstrips V
    c. debate A

2 KT, 1 A, 7 V

Fred Foremost

Pre-test:

1. desert plants:
   - a. have students bring a collection of cacti from home KT
   - b. assemble relevant books from the library for use as motivators and as an information source V
   - c. use a film or a filmstrip on the topic V
2. growth of frogs:
   - a. collect egg samples and watch the growth KT/V
   - b. go on a field trip to a marsh that contains eggs and tadpoles KT
   - c. use model to provide the visual representation of stages of development V
3. double digit multiplication:
   - a. demonstrate lattice multiplication V
   - b. demonstrate multiplication using the various factors V
   - c. use calculators to verify any resultant addends and then to verify the final sum KT

4 KT, 0 A, 6 V

Post-test:

1. desert plants:
    - a. have students categorize a collection of pictures on similarities and differences V
    - b. bring cactus samples to the classroom V
    - c. read about desert plants from books brought to class V
2. growth of frogs:
    - a. bring frog and toad eggs to class V
    - b. use visual displays of the frog life cycle V
    - c. use models of frog development V
3. double digit multiplication:
    - a. use grid paper to aid students to maintain place value V
    - b. break the multiplier into two components, carry out the multiplication, then add 0
    - c. use board work to observe student performance KT

1 KT, 0 A, 7 V

Gary Green

Pre-test:

1. area of a circle:
    - a. compare qualitatively the area of

a variety of circles	0
b. show the relationship between diameter and the circle	0
c. doubling successely the diameter, what happens to the area	0
2. Charter of Rights:	
a. use simulation games involving conflict situations	KT
b. brainstorm the meaning of "rights"	KT
c. present the historical perspective on the Charter of Rights	0
3. double digit multiplication:	
a. place value system and expansion of numbers	0
b. do multiplication using successive addition	0
c. relationship between multiples and multiplication	0
	2 KT, 0 A, 0 V

Post-test:

1. desert plants:	
a. creation of a desert environment in a classroom aquarium	0
b. films about desert regions	V

    c. field trips to desert regions KT

2. area of a circle:

    a. in a Lab do measurement exercises involving circular objects KT

    b. do measurement involving circumference and diameter and their relationship 0

    c. find the area of a circle using approximation or the sum of triangles 0

3. double digit multiplication:

    a. students use the estimation process to judge the reasonableness of the response KT

    b. place value and the effect of carrying on regrouping (cryptarithmetic) 0

    c. multiplication as repeated addition 0

3 KT, 0 A, 1 V

Harry Horner

Pre-test:

1. desert plants:

    a. show a film or a filmstrip V

    b. bring a cactus to the classroom for

    examination and discussion V/A
  - c. list characteristics from pictures of examples V

2. growth of frogs:
   - a. teach this during the spring 0
   - b. collect tadpoles from a pond KT
   - c. students record regular observations V
3. feudal system:
   - a. use role playing KT
   - b. have students describe their feelings about the roles KT
   - c. bring in a local politician to discuss local government KT/A

4 KT, 2 A, 4 V

Post-test:

1. desert plants:
   - a. bring in a desert plant and a plant from a contrasting environment V
   - b. visit a flower shop or botanical garden to study the desert plant KT
   - c. have students care for a cactus in the classroom KT

2. growth of frogs:
    - a. bring in frogs eggs and allow them to develop, students record changes V
    - b. visit a nearby pond KT
    - c. have students research and make charts of stages of life cycle V

3. Charter of Rights:
    - a. bring in a lawyer or a judge to talk about application of rights KT/A
    - b. have students read possible violation cases and decide V
    - c. show how each article affects each student 0

4 KT, 1 A, 4 V

Iona Innis

Pre-test:

1. desert plants:
    - a. using a map and a beaker, discuss average rainfalls, needs for life, and adaptations necessary to live A/V
    - b. show a pre-discussion film on

plant adaptations V

c. brainstorm what they know KT

2. growth of frogs:

a. field trip to a pond KT

b. show a film on the topic V

c. compare to human development 0

3. feudal system:

a. library research to compare to other systems V

b. investigate own background to determine position of grandparents KT

c. invite older person in to speak KT/A

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3 KT, 2 A, 4 V

Post-test

1. desert plants:

a. show a film with follow-up discussion V

b. create a desert environment in a terrarium, use books as a resource to operate and to select plants V/KT

c. field trip to Muttart Gardens KT

2. growth of frogs:

a. collect eggs and observe the growth of tadpoles in the classroom, perhaps take photographs V

b. use a film and follow-up discussion V

c. assign a report on how a frog develops KT

3. Charter of Rights:

a. define Charter of Rights 0

b. compare and contrast various charters 0

c. develop a Charter of Rights for Children 0

3 KT, 0 A, 4 V

James Jackson

Pre-test:

1. desert plants:

a. bring in a cactus as a start for a discussion of the needs of that type of plant, compare to others A/V

b. bring in a guest speaker who has lived in a desert area A/KT

c. a science experiment - try growing North American plans under a desert conditions - what happens ? KT

2. feudal system:
    - a. students role play the hierarchy KT
    - b. review the present system and consider other ways of organizing 0
    - c. bring in an ant farm - observe the hierarchy V
3. Charter of Rights:
    - a. use newspaper articles of recent court cases as a base for discussion A/V
    - b. bring in a lawyer A/KT
    - c. compare the legal structure prior to the Charter to after the Charter 0

4 KT, 4 A, 3 V

Post-test:

1. desert plants:
    - a. using actual plants, compare V
    - b. contrast the two plants V
    - c. show a motivational film dealing with the desert V
2. growth of frogs:
    - a. compare and contrast human/frog growth 0

b. Bring in tadpoles, chart development V

c. Show a film on growth and development V

3. Charter of Rights:

a. compare what rights students think they have with Charter. Write about a hypothetical situation. A/KT

b. bring in a speaker to talk about rights A/KT

c. show a film on the Charter that compares it to the old Bill of Rights. Assign an evaluative essay on which is better. V/KT

3 KT, 2 A, 6 V

Kevin Kramer

Pre-test:

1. desert plants:

a. have students grow a cactus using various methods on different plants KT

b. use visual aids of desert plants V

c. have students research differences between local plants and desert plants V

2. feudal system:

a. role play an issue with the class set up in a feudal hierarchy KT

b. show foundations of present day things based on feudal system 0

c. use simplistic diagrams of feudal hierarchy and feudal holdings V

3. Charter of Rights:

a. have students draft a Charter of Rights for students in class KT

b. review news articles showing where individual rights have been trampled V

c. study a period such as the French Revolution 0

3 KT, 0 A, 4 V

Post-test:

1. area of a circle:

a. find the area of the classroom, chalk out a circle within and subtract KT

b. have students draw a circle on graph paper and count the squares V

2. feudal system:

a. use models or diagrams of typical feudal manors V

b. role play a feudal court KT

    c. small group discussion of similarities and differences between our present system and the feudal system KT

3. Charter of Rights:
    a. small groups develop a student rights charter KT
    b. examination of news articles re: denial of rights with analysis of alternatives V
    c. debate on a human rights issue A

4 KT, 1 A, 3 V

Larry Lewis

Pre-test:

1. desert plants:
    a. deprive a real plant of water and observe V
    b. give frequent waterings to a desert plant and observe V
    c. take a cutting and see if it will grow 0
2. growth of frogs:
    a. compare growth of tadpoles in light/dark V

b. compare a single tadpole in a jar to multiples in a jar V

c. change water temperature and observe V

3. feudal system

a. discuss with students the advantages of being a landowner A

b. discuss with students the outlook and future of being a serf A

c. role play the power a landowner had over his serfs KT

1 KT, 2 A, 5 V

Post-test:

1. desert plants:

a. contrast to other plants 0

b. have live plants available, imagine what it would be like to be the root of the plant KT

c. watch a film which puts the plants in context V

2. growth of frogs:

a. keep a growth chart V

b. compare with growth patterns of

  other animals Ø

- c. photograph stages and have students report on the evidence V

3. feudal system:
   - a. put into context of the time and compare with today Ø
   - b. research and then play act one aspect of the feudal system V/KT
   - c. draw a chart to indicate the structure of the feudal system V

2 KT, 0 A, 5 V

Michael Musselman

Pre-test:

1. desert plants:
   - a. display pictures of plants V
   - b. bring a cactus to school Ø
   - c. have students grow plants in a sand box KT
2. growth of frogs:
   - a. gather tadpoles or eggs for a school aquarium Ø
   - b. find diagrams of development stages V
   - c. show a film on the growth cycle V

3. feudal system:

a. role play a feudal system situation	KT
b. show students a Shakespearean historical play	V
c. discuss the "world-view" that emerged following the fall of the Greco-Roman culture	A
	2 KT, 1 A, 4 V

Post-test:

1. desert plants:

a. bring plants to class and allow students to examine and touch them first hand	KT
b. Ask students to pretend they are a desert plant and to state what they need to survive	KT
c. display pictures of the desert the day prior to the lesson	V

2. growth of frogs:

a. field trip to a local pond	KT
b. display developmental charts on a wall chart	V
c. allow students to prod, poke and	

examine specimens at various stages of development KT

3. feudal system:
   - a. simulate a feudal system KT
   - b. have a costume day in which students dress in feudal costumes KT
   - c. read Ivanhoe or Robin Hood to the class A

6 KT, 1 A, 2 V

Ned Niederhaus

Pre-test:

1. desert plants:
   - a. arrange to have cacti, etc. to show V
   - b. show a National Geographic video V
   - c. field trip to Muttart Conservatory or equivalent KT
2. growth of frogs:
   - a. catch tadpoles and watch growth KT
   - b. use Milliken-type diagrams V
   - c. have students write up observations from a film V
3. area of a circle:
   - a. calculate with string for several circles KT

b. show derivatives of pi 0

c. cut out and use computer generated models KT

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4 KT, 0 A, 4 V

Post-test:

1. desert plants:
    - a. visit Muttart conservatory KT
    - b. show film/filmstrip and compare with rain forest on chart V
    - c. students choose and draw plants and compare what they have in common KT/V
2. growth of frogs:
    - a. collect eggs and tadpoles 0
    - b. use models V
    - c. do coloured diagrams that show change in growth cycles V
3. area of a circle:
    - a. use large graph paper and compare results, compare with formula V
    - b. physically demonstrate and work

students through derivation of pi V/KT

c. locate circles, i.e. centre cut in a ball, and calculate the area 0

3 KT, 0 A, 6 V

Log Summaries

Throughout the course participants were asked at the end of each session to answer a few questions about their progress in the course to date. They were also encouraged to make comments or to ask questions of the instructor. A complete collection of the log questions is included in Appendix E. Most participants completed the log each time. Missing answers show that a participant was absent, left early, or chose not to respond. The summaries are as written by the participants. Some are adjusted for clarity by replacing pronouns with their antecedents when those antecedents were in the original question.

Andy Amherst

Log Three:

- I have learned the communication skills and am beginning to feel more natural about their use.
- the presentation of effective teaching skills has increased my range, I'll start working the placement skills into my own class on Monday
- The field dependent model seemed easier to me

Log Four

- I found it interesting and valuable to learn about the modes of learning. This is something that should be taught to all teachers.
- Any resistance that could possibly be met in the school setting has been encountered in one way or another in this course.
- As an observer you must stick to observations and discussion about these observations. Lead the teacher to do most of the talking. Accept values: values are neither right nor wrong !

Log Five:

- I feel strongest in the questioning strategies and the learning styles.
- I feel weakest in role playing.
- I would attend a reinforcement session in the fall. It should include more of the same.
- I would recommend the course to: administrator / teacher pairs, to teacher pairs, and to administrators alone.

Boris Barishnikov

Log One:

- I enrolled in this course to improve my ability to observe and assist teachers.

- I am most interested in the questioning strategies.

- I can't say what I expect to learn most from at this point - I expect the questioning.

Log Two:

- Before the role play I experienced some confusion, some nervousness and still some unfamiliarity with terms. During there was an increase in comfort level, and after there was relief and satisfaction at having managed it.

- The Stallings model allows for use of a third party (a video or another teacher). It allows for sufficient repeats and a review of the stages.

Log Three:

- I have gained a greater awareness of what types of question I am using and where they are leading me. Also, the importance of comfort.

- The effective Teaching Practices so far have given me an awareness of question variety. I see myself incorporating them in the model I presently use, to enhance it.

-The field dependent model is more wide open. The situation could vary though, and on occasion I would want to use Stallings.

Log Four:

- My knowledge is expanding in the area of learning styles knowledge, questioning, and the variety of methods of presentation needed.

- This course has increased my awareness of all aspects of observation and techniques for reporting back.

- It has caused a re-examination of my current methods - confirmed some, and will set new directions for me, upon completion off course and reflection.

Log Five:

- I feel strongest in the area of questioning techniques.

- I feel weakest in the identification of some aspects relating to my questioning techniques in conferencing.

- I would want to attend a reinforcement session in the fall; I would like to see a general overview.

- I would recommend this course to administrator / teacher pairs.

Carla Cameron

Log One

- I am here because my principal asked me to come, and it sounded interesting.

- Of most interest to me is being able to apply the effective teaching techniques in my own classroom.

- I expect to learn most about evaluation methods.

Log Four

- My knowledge of effective teaching has expanded through the reminder of the teaching modalities and their importance, through examining other teachers' performance, and through the textbook case studies and activities.

- I'm seeing more and more concrete things that we can look for in effective teachers.

- This course is giving me a system to follow in a coaching situation, areas of teaching behaviour to look for, and how to meet people's resistance.

- This course has helped me choose evaluation formats to use, and to find my own learning style. The group discussion was helpful.

Log Five:

- I feel strongest in teaching using different modalities.

- I feel weakest in questioning skills and in actually coaching someone else.

- I would attend a reinforcement session. I would like to see an outline of how to meet resistance, things to look for when coaching, and a practice coaching session.

- On the post-test I felt I had tangibles to focus on. I understood the theories behind the questions.

- I would recommend this course to administrator / teacher pairs, to teacher pairs, and to individual teachers with whom I would like to do a coaching program.

Denise Doherty

Log One

- I enrolled because I am a new administrator and felt the course would be useful.

- I am interested in coaching teachers in improved methods.

- I expect to learn most by reading and listening.

Log Two

- Before and during the role play I felt fear, afterward, slightly better- relieved.

- The Stallings model organizes our thoughts and points directions to go in coaching.

Log Three

- The conferencing skills have made me consider alternatives of questioning techniques, and they affirm my belief in the importance of positive reinforcement.

- The effective teaching practices have given me some insight into coaching teachers, and some direction to pursue. I will use them in the classroom with students, and in the supervision of teachers and parent helpers.

- I prefer the field dependent model. It is not too cluttered, but concentrates on the important issues.

Log Four:

- My knowledge of effective teaching practices has expanded. I am more aware of questioning techniques. I tend to talk too much and have tried to let the teacher do more talking by paraphrasing her statements.

- I have learned there are methods which are more likely to bring about change: accepting a teacher where he is at, and leading him to make the suggestions. Tonight, another idea: to accept a new idea a teacher must have sufficient knowledge and find that the idea works for him in his classroom.

- My own study preferences are visual, but others obviously learn better in other ways. I will be more aware of other learning styles. I believe I have always appreciated different teaching styles.

Log Five:

- I feel strongest with the questioning techniques and the teaching styles (KTAV).

- I feel weakest in the coaching of teachers because of the lack of doing so far.

- I would not attend a reinforcement session. I prefer now to re-read the information and digest it at my leisure. (Guess what - I'm visual !)

- The pre-test/post-test were a good review - though I would have preferred to have done these tests at home where I could review the material first and spend more time on them.

- I would recommend this course to administrators alone.

Edward Evans

Log One

- I enrolled to learn the effective teaching practices.

- I am most interested in the effective teaching practices.

- I hope to become more effective in teaching as well as in coaching.

Log Two

- I felt unprepared for the role play - not fully versed in the skills and knowledge required for the particular roles.

- The strength of the Stallings model is the way it helps to break down each part and then put them back together for a more complete look at the whole.

Log Three

- I have learned when to apply the conferencing skills, have greater familiarity of the skills and greater ease in using each.

- The effective teaching skills reinforce my own skills.

- I will use them in my own teaching and maybe with individual staff members.

- I prefer the field dependent model because it is more versatile; has wider application.

Log Four

- My knowledge of effective teaching is expanding through more effective observation - sharpening my observation skills, and through the reading of handouts provided.

- I am building up the realization that there is always room for growth.

- The course is providing me with the skills to identify and deal with resistance.

- I have greater ease and comfort in the use of conferencing skills.

- The course motivates me to apply some of the skills and to practice them on the job.

- I have expanded my awareness of my own mindset, values and preferences by sharing and having others share their ideas in class, and by discussions which often threw new light on things as well as clarify ideas.

Log Five:

- I feel strongest in the teaching effectiveness strategies to look for when observing a teacher.

- I feel weakest in coaching - responding to resistance statements.

- I would attend a reinforcement session in the fall. I would like to see role playing and a practice coaching session.

- The pre-test identified things I needed to learn, and the post-test identified those things I did not learn.

- I would recommend this course to teacher pairs, and to individual teachers with whom I would like to follow up with a coaching program.

Fred Foremost

Log One:

- I enrolled in this course to improve my skills in teacher visitation and subsequent changes in teacher performance.

- I am most interested in conferencing skills.

- I expect to learn most about the conferencing skills and the effective teaching practices.

Log Two:

- For the role playing I was frustrated with integrating the number of things to be done: a) recording the frequency of OEQ, CEQ, CP; b) being part of the role play; c) planning where the role play is to go,

- I am still not clear on the Stallings model. More work with it will allow an opinion.

- Could there be more time to practice the various types of statements.

Log Four:

-My knowledge of effective teaching practices has expanded by putting things that I have known intuitively or from experience into a theoretical framework. Things now have labels and can be categorized. The KTAV and questioning strategies materials are valuable. The course has also confirmed many of my personal observations and judgements about what is good teaching.

- The course is giving me practice in organizing my thoughts and objectives. Once they are clear the arguments to support the direction can be developed. The conference strategies have made me more aware of my tendencies in questioning. e.g. the use of "but" and the changes in me will bring about the "openness to change" in my staff.

- Simply taking the time to think about what I am doing and discussing my ideas in the course forum has made me aware of my preferences. Maybe I will even change some of them.

Log Five:

- I feel strongest in the conferencing skills and the learning styles.

- I feel weakest in the nonverbal communication. (Maybe because I missed that session.)

- I would attend a reinforcement session where I would like to see more on the conferencing skills.

- The pre-test/post-test structure did not help me to focus on change in myself.

- I would recommend the course to teacher pairs.

Gary Green

Log One:

- I enrolled to improve my coaching skills.
- I am most interested in the information on questioning.
- I expect to learn most about teacher conferencing .

Log Two:

- Before role playing it felt like an artificial situation. This feeling began to disappear during role playing. One got used to it.

- The strength of the Stallings model is the emphasis on the positive. There is a lot of responsibility with the coach and not just with the teacher being evaluated.

- Excellent session.

Log Three:

- I am much more aware of question and conferencing skills.

- The presentation of effective teaching skills has been useful to me because I liked to re-examine my own skills and feel that I recognize better teaching. I see myself being more positive in the initial conference.

- The field dependent model appeals to me . The Stallings model appears to be somewhat artificial in that there is so much overlap and the follow up kind of things are almost givens.

Log Four:

- I have gained the ever increasing abilities to ask more effective questions. A better understanding of the learning styles of students and the need to make adjustments in my teaching to reflect these learning styles.

- My confidence in asking questions is noticeably increasing. That allows me to deal with resistance displayed by the teacher.

- It has clearly helped me to distinguish between evaluating and coaching. The emphasis on the positive and building on the positive is an important element in coaching. I have never had any problems with commencing on a positive note. In many respects I see myself being at that point already. This session has certainly reinforced the importance of the positive nature of coaching in me.

Log Five:

- I feel strongest in conferencing skills, coaching model, questioning skills.

- I feel weakest in learning styles.

- I would definitely want to attend a reinforcement session. There should be reinforcement sessions once every year, focussing on one particular area.

- I would like a session on questioning skills, or teaching styles, or learning styles.

- The pre-test responses were more related to my current practice, while the post-test responses reflected more the newly acquired knowledge in this course.

- I would recommend this course to administrator / teacher pairs, and to administrators alone.

Harry Horner

Log One:

- I enrolled in this course to gain more insight into developing more positive coaching skills.

- I am most interested in the effective teaching practices.

- I expect to learn most about effective teaching practices.

Log Two:

- Before role playing I was not sure what to do, during there was some frustration at ensuring that skills learned would be covered, and after, there was greater clarity of skills and how to use them.

- I am not clear on the Stallings model yet.

Log Three:

- I have gained a greater sense of responsibility in acknowledging the position of the person (teacher) being coached, and a greater appreciation for the skill required in coaching towards greater improvement.

- The effective teaching practices presentation has been useful so far. I expect to see myself using them in coaching individuals under my supervision toward improvement.

- The field dependent model appeals to me because it allows for more flexibility and is simpler.

Log Five:

- I feel strongest in the teaching strategies.

- I would want to attend a reinforcement session in the fall where I would like a general overview.

- I would recommend this course to administrator / teacher pairs.

Iona Innis

Log One:

- I enrolled in this course to improve administration "coaching" skills.

- I am most interested in information on coaching.

- I expect to learn most about coaching.

Log Two:

- Before the role playing I was slightly anxious, during, I felt good, and after I felt it was useful.

- The Stallings model forces you to plan - implementing for change.

- Good Day!

Log Three:

- I have gained practice in application. Wish I'd had the practice sooner and more of it - continuation of T.E.A.C.H.

- The presentation of effective teaching skills has been useful for better, improved questioning techniques. I see myself using them.

- The field dependent model seems less artificial - I like the positive approach. Builds rapport !

James Jackson

Log One:

- I want to improve my conferencing skills, to learn about theoretical based facts about effective teaching, and to learn about effective teaching.

- I am most interested in the learning styles.

- I expect to learn the most about learning styles.

- I would like a more detailed list of authors in each area for further reading in each of the research based topics.

Log Two:

- Before role playing I felt a lack of information about the teacher, during I found that pausing to think about what you were doing in order to do it right made for an unnatural conversation. After, I had some concern about the benefit.

- The Stallings model provides structure to a coaching approach. Maybe another model for comparison would be beneficial.

- Maybe a tape recorder to tape our role playing will help to identify strengths, etc.

Log Three:

- From the conferencing skills I have gained an ability to direct each activity towards your goals and an ability to use the skills through practice.

- The presentation of effective teaching skills has been useful in dealing with students. I am conscious of what I am doing. I see myself using the skills in parent, teacher, and student conferencing.

- The field dependent model appeals to me. It is flexible - allows great latitude to focus on how you will deal with a teacher.

Log Four:

- I am expanding my familiarity with knowledge base of effective teaching practices, with research behind the knowledge base. I am learning by observing effective teachers on tape and by discussing situations with colleagues.

- The conferencing skills allow one to focus and direct conversations to meet your own agenda. Supportive skills allow one to break down barriers.

- This course forces you to re-evaluate and reassess your own teaching styles and learning modality preference. It is helpful to know where you are coming from in order to assist teachers with growth potential.

Log Five:

- I feel strongest in questioning strategies.

- I feel weakest in conferencing.

- Depending on the situation I would probably attend a reinforcement session in the fall. I would like to see a review of the major concepts. Any new research articles would be appreciated.

- I would recommend this course to teacher pairs and to teachers alone.

Kevin Kramer

Log One:

- I enrolled in this course because I have been dissatisfied with the method of teacher evaluation for some time. I am interested in improving my abilities to be part of effective teacher evaluation for improvement.

- I am most interested in the effective teaching practices and the conferencing skills.

- I hope I will learn from all of it.

Log Two:

- I felt neutral about the role playing.

- The strengths of the Stallings model are: a) given a program of action, b) both teacher and principal are aware of what is happening, c) it forces the principal to think before he/she acts.

Log Three:

_ I have gained a greater appreciation of the validity of this process.

- The presentation of the effective teaching practices has been useful so far because I know what to look for. It will greatly alter my observation techniques in my classroom visits.

- The field dependent model appeals to me because I like the flexibility.

Log Four:

- I am definitely becoming aware of what is involved in effective teaching - the KTAV stuff is a whole new area for my feeble mind !! The specifics of effective teaching have expanded my observation techniques in classrooms.

- I am too stubborn and expect people to be open to improvement without resistance. I may be able to recognize resistance but I really still have a hard time accepting it and handling it positively.

- The role play and the discussion with other "students" really help to identify my areas of "weakness." What these discussions really do is confirm my perceptions of my mindset. THAT IS REALLY SCARY !!!

Log Five:

- I feel strongest in none of the course areas.

- I feel weakest in all of them, but I can see hope for improvement.

- I would not attend a reinforcement session in the fall.

- I would recommend this course to administrator / teacher pairs, teacher pairs, administrators alone, teachers alone, or teachers with whom I would like to follow up with a coaching program.

Larry Lewis

Log One:

- I enrolled in this course to improve my basic skills to improve education for children.

- I am most interested in the effective teaching practices.

- I expect to learn most about effective teaching practices.

Log Two:

- Before the role play I was a little unsure, during I was uncomfortable, felt I was being manipulated, after, felt it was useful.

- The Stallings model forces you into thinking about planning and implementation.

- Good Day - liked the part on teaching strategies to observe.

Log Three:

- I have gained a greater clarity in posing questions.

- I begin to appreciate the power of posing the right question.

- The presentation of effective teaching practices has increased my effectiveness in conferencing. I will be using them in future.

- I like the field dependent model. Its simplicity makes it more effective for me.

Log Four:

- My knowledge base is greater than before. I have had a nodding acquaintance with many of these practices, but find now they are falling into place. I found the KTAV stuff great. I've heard about kids having different modalities, but this made sense and I can now buy into it a lot more.

- This course has helped me to meet resistance by having a broader knowledge base, by simulation, and by the enthusiasm and patience of the instructor. Relating things to real life experiences and situations really helps. It's my own resistance perhaps that needed changing most of all.

- I've been more aware of the usefulness of coaching instead of evaluation - because of background - both through university courses and experience I've been more prone to evaluation, so I did at first feel a resistance to "coaching", as being perhaps "Part Policy" - I've not totally bought in yet, but am almost there.

Log Five:

- I feel strongest in the KTAV and questioning skills.

- I feel weakest in the levels of questions and SDLOC - need more time to think.

- I would attend a reinforcement session in the fall. I would like a general overview as you did at the beginning of session - but also sharing session to see where we are at.

- I would recommend this course to administrator / teacher pairs, teacher pairs, administrators, teachers, and individual teachers with whom I would like to follow up with a coaching program.

Michael Musselman

Log One:

- I enrolled in this course to improve my skills as a coach for teachers.

- I am most interested in conferencing.

- I expect to learn most through role playing activities.

Log Two:

- Before role playing I didn't understand the instructions, during I found frustration thinking and speaking so there was a natural flow and application of the question framework.

- The strength of the Stallings model is its focus in on solutions to a problem area, and 2) there must be a "technical" description of a problem (a framework for discussion)

Log Three:

- I have learned to limit an agenda, to keep the agenda focussed on the teacher's concerns.

- I have learned to go with the flow yet have a game plan for each interview session.

- The presentation of effective teaching practices has made me aware of certain personal habits that may arouse teachers' defences. I will use them in conferencing and I will use them in a teacher in-service program.

- The field dependent model appeals to me because simplicity is the key.

Log Four:

- Learning modalities may explain why junior high students find the transition from elementary school so difficult. Elementary methodologies probably have more KT activities, the activities become more A and V at higher levels. Questioning techniques and strategies have been useful for me to employ and to observe in others. It may become a focus for coaching next year.

- I am beginning to accept that there are strategies to bring about teacher self-awareness without a frontal confrontation over my perception of teacher weakness. The end result is the same - and there is no bloodshed.

- Change must be research driven. Now I have the data and findings. The articles are good.

- It is hard to escape an evaluative mode and think about "coaching." (I have a tendency to lapse into evaluation.)

- I feel good about the class observations and data collection that I have done. I will attempt to avoid the judgmental statements and stick more closely to the observational data in conferencing with teachers.

- I prefer the less structured approach to classroom observations, and the scripting is a useful tool.

Log Five:

- I feel strongest in the questioning strategies and the conferencing skills.

- I feel weakest in the learning styles.

- I would attend a reinforcement session in the fall. I would like to see more on breaking down resistance.

- It made me aware of a different framework I might use (from a personal "common sense" bias to a knowledge/research based approach.)

- I would recommend this course to administrator / teacher pairs, to teacher pairs, and to administrators alone.

Ned Niederhaus

Log One:

- I enrolled in this course to improve my communication skills with teachers - most important.

- Actually I am interested most in improving my own classroom skills, I enjoyed question modes area tonight.

- I expect to learn most about listening skills, nonverbals, etc. especially in the CP area.

Log Three:

- I have gained a realization of the advantage of practice in a non-threatening situation.

- The presentation on effective teaching practices has been useful in its focus on questioning, building for the positive. I see myself using them in more frequent teaching supervision.

- Time flew today - most enjoyable experience - some administrators are quick study artists, so keep reinforcing the good points like active listening. Thanks.

Log Four:

- Some of the models, particularly when presented in a simplified form stick with you. With experience, you can reflect on past uses of some of the techniques outlined, and make a conscious effort to implement the knowledge. What I'm saying is that the knowledge is growing faster than ever because of the opportunities to put it into practice, which are, for me, greater than ever.

- I don't really feel there is significant resistance to change when the proper approach is used. What the course is doing is giving me confidence to apply my gut feelings because of the support provided by a research base.

Log Five:

- I feel strongest in KTAV - to the extent of involving a mix of activities to pull in those with various learning style preferences.

- I feel I could develop more on how to encourage "resistant" teachers ... may best be an area for future development, however.

- A reinforcement session is definitely a good idea since I'd start coaching in October likely. I would like an overview with group assessment of individual's coaching skills - particularly in choosing appropriate response to various teacher statements, etc. in conferences.

- It made clear that I now have sufficient tools to do some coaching work.

- I would recommend this course to individual teachers with whom I would like to follow up with a coaching program. It would be useful to anyone.

Participant Profiles

In the month following the conclusion of the course each of the participants participated in an interview. Each interview followed an outline (See Appendix D) and lasted between thirty and forty minutes. The results were not transcribed, but were used to make a profile of each participant. The information included in these profiles, including direct quotations, is based entirely on the interview responses.

Participant: Andy Amherst
Elementary School Assistant Principal

Previous Experience: Andy has five years experience as part of an administrative team who set goals for their staff, provide the training opportunities needed for staff to reach the goals, and evaluate staff members as they work toward the objectives. He is highly experienced in teacher observation and report writing.

Beliefs: Andy says "The content was great. I didn't mind giving up the time - it was worthwhile." He has always approached teacher observations with a positive outlook. He says that the course has made him aware of specific teaching skills to look for, and of the great deal of information he has yet to learn. He calls the course a good "stepping stone" to more effective teaching practices to use himself and to look for in others. He believes that he has seen teachers practising many of the skills without him knowing specifically what was happening. Andy feels that the course has enabled him to focus much more on specific, observed techniques rather than having general feelings of watching desirable teacher behaviour. He states that the course has made him more able to lead others to make conclusions and judgements based on their recorded behaviour, and that the models, observation instruments and forms used in the course are manageable.

Skill Use: Andy has examined his own teaching practices and tried out some of the new approaches. He is revamping his own plans for next year to be sure to include what he has learned in this course. He has used some of the skills, particularly the verbal skills, with both staff and students. He is more conscious of his verbal techniques and makes a conscious effort to practice. At a recent Chamber of Commerce Trade Fair he spent his time listening to the salesmen and analyzing their skills for the techniques he had learned.

Plans: Andy will be working with the other school administrator to involve the staff in practising the effective teaching skills taught in this course. One way Andy plans to get the staff to "buy in" to change is to show them how the material works in his own classroom. He expects to continue reading in the techniques this summer, and has asked for a list of and the loan of related books and articles. In addition, he is planning to take another of the ATA-sponsored courses in the near future.

Course Strengths: Andy believes that the communication skills will be of use to him in all aspects of his life, and the learning styles information will help him to help teachers do more deliberately and more effectively things that they do already.

Course Weaknesses: Andy found the intense, nine-hour sessions less desirable than other time schedules. He would have preferred to take the course over a longer period of time.

Participant: Boris Barishnikov

Elementary School Principal

Previous Experience: Boris has fifteen years administrative experience and is highly experienced at teacher observation and report writing. He has always seen his role to include leadership in staff development and has trained the staff in the Madeline Hunter lesson analysis approach.

Beliefs: Boris believes that he will be able to incorporate the practices he has learned in this course with his present style. He has always approached teacher observations with a positive outlook. He was surprised early in the course to find himself during teacher observations noting first the practices he wanted to criticize. At the end of the course he was identifying specific techniques in use by the teacher and extending his normally positive approach. The course made him aware of his limitations at remembering, defining, and identifying specific strategies used by an observed teacher and therefore the need for simple yet accurate recording procedures. Boris calls the methods he has learned "more specific as opposed to self-taught." He believes the course has expanded his ability to observe and report on identifiable teaching techniques and behaviours and to describe them with specific terms. He believes that he was previously using many of the skills unconsciously, and is now using them deliberately. He is glad he took the course as it has reaffirmed much of his previous knowledge and made him feel good about his practices and those in his school.

Skill Use: Boris has had difficulty separating coaching from evaluation. He says he is now able to get the teacher to talk more and himself less in a conference. He notes that the course has increased his knowledge of effective teaching and helped him in his own teaching.

Plans: Boris has his school on a staff development cycle. The previous cycle has just come to a close and he plans to begin a new one with the material from this course. He wants to re-read the material from the course and to discuss it with his assistant who also took the course. They will adapt the material for the staff.

Course Strengths: The strength of the course was in the variety of techniques with which it was presented.

Course Weaknesses: Boris does "not even want to appear to criticize what was done." The weakness of the course to him relates to its strengths. He would have liked more time to go further into the two areas of research of most interest to him. If there is something he would add it is more time on the learning styles material.

Participant: Carla Cameron
Special Education Teacher

Previous Experience: Carla is the only full-time classroom teacher who took the course this time. She has taught three years in special education and has recently found herself being consulted by her colleagues for ways to handle delicate situations and to improve their performance. She has taken Project T.E.A.C.H. which includes the communication techniques involved in coaching. She expressed an interest in eventually becoming an administrator.

Beliefs: Comparing her opinions with others and discussion of the course materials convinced Carla that educational leaders need to insist that teachers work for improvement. She states that she now has a better idea of what to look for in observing another teacher, and that she would be able to develop and implement a coaching plan for improvement. She believes that the communication skills are effective. She feels that when there is a need to be direct with a teacher in need of improvement, the supportive skills will help to make the teacher receptive. The course gave Carla an opportunity to watch regular classroom teachers teach, to review previously studied material, and to learn coaching techniques. She did not previously have a framework for helping other teachers. She believes that use of the course techniques would bring out ways to improve as seen by both the administrator and the teacher and would improve staff morale. She states that implementing the program will increase learning, increase the teacher's success rate, and build teacher confidence. "It was not just idealistic and theoretical." Use of the techniques would "build rapport with staff, improve school spirit, and give the attitude that the quality of teaching is important."

Skill Use: A non-administrator, Carla has had no opportunity to practice the coaching skills. She has worked with the communication skills and admits a need to practice them more consciously.

Plans: This fall Carla would like to work on a collegial coaching plan with another teacher taking the course.

Course Strengths: Carla appreciated the way the course allowed administrators to see back into the classroom. She felt the course was very practical.

Course Weaknesses: Carla believed the weakness of the course was in its restriction to administrators. She felt the course could have placed more emphasis on the fears felt by teachers being observed by administrators as administrators often do not realize the intensity or the impact of these fears. She felt that having teacher-administrator pairs would have helped the administrators separate coaching from evaluation, and would have allowed minisessions for practicing skills in which the administrator would have had to demonstrate understanding of the skills to a teacher.

Participant: Denise Doherty
Elementary School Assistant Principal

Previous Experience: Denise has been an administrator for only half of the school year. Prior to entering the course she had done little teacher observation.

Beliefs: Denise was unsure of herself at the beginning of the course and dreaded the first role play. However, she felt she learned from them and felt more confident at the end of the course. Before the course she felt her observation approach was one of intuitively judging classroom atmosphere. The course gave her specific labels to identify effective teaching practices. "Although I was not always in agreement with the others, I benefited from the discussion." She believes she could now show another teacher how to practice the techniques and could help with improvement. She is glad she took the course and says it was a good start for her as an administrator. She would recommend the course to others saying, "I found that the time went very fast and did not mind giving up nine hours on a Saturday."

Skill Use: Denise says that because of the timing of the course she has had little opportunity to practice the skills on teachers. She has tried the communication skills while working with a teacher aide and says they worked well. She says also that the communication skills have improved her listening abilities, and that the effective teaching practices have now been implemented consciously into her own classes.

Plans: Denise plans on coaching teachers next year.

Course Strengths: The first hook into the value of the course for Denise was paraphrasing. She also found that having the opportunity to watch, think about and discuss the filmed teachers gave direction to her own thinking.

Course Weaknesses: Denise never enjoyed the role playing; she would have liked more background information about the teacher before the conferencing. Still, she recognizes it had value for others. The other addition she would have added to the course is more time to focus her thinking about the logs at the end of each session.

Participant: Edward Evans

Elementary School Principal

Previous Experience: Edward has been an administrator for sixteen years.

Beliefs: The course confirmed his beliefs in the value of a positive approach to teacher observation. It also made him aware of a need to make more effort in this area. He says he now has a "more positive approach" and will now focus on "teacher strengths" which will help teachers perceive him as a "colleague and team member." He believes the course has given him the tools to approach and initiate coaching with teachers. Although he is not yet totally comfortable with the degree to which he has absorbed all of the material, he expects that as he practices his skills will improve and he will become more comfortable and effective. He says that prior to taking the course his knowledge of effective teaching practices was in "bits and pieces - in a general way." He now has the vocabulary to specifically identify a technique in use and to link it to an observed behaviour.

Skill Use: Edward has tried the communication skills and the effective teaching practices mainly with his own students. He is aware of his skill use during a conference and tries to choose the appropriate one. He says that the skills force him " to think of what the other person is saying," as well as to "bring out concerns, clarify meanings, and add understanding."

Plans: He hopes to begin a coaching program with a number of teachers this fall. He will do more reading and use more thinking time this summer.

Course Strengths: Edward liked the usefulness and the practicality of the course. He sees its strength coming from 1) its positive approach, 2) its collegial approach - it is not evaluation but helping, and 3) helping him to identify specific effective teaching techniques.

Course Weaknesses: Edward says that he "cannot identify any weaknesses per se" in the course. Still, he would have preferred to take the course over a longer time span. This would have allowed him more time for practice. He also would like more background reading for the effective teaching practices although he notes that the books were available during the course.

Participant: Fred Foremost
Elementary School Principal

Previous Experience: Fred has twenty-one years experience as an administrator at the elementary and superintendency level. He is highly experienced at teacher observation and at reporting on those observations.

Beliefs: Fred says that the course met his expectations. It clarified and reinforced the more positive aspects of his current teacher observation and conferencing techniques. He suggested that before taking the course he, like many other administrators, tended to operate intuitively. He just "knew" when he was seeing effective teaching. Now, he says he is more able to break a lesson into specific observed skills for which he has convenient labels. He sees value in having clearly defined definitions of things to look for. The communication skills have expanded his ability to lead teachers to examine their own classroom behaviours and to reach conclusions for improvement. Fred believes that he will have no difficulty implementing the course with his "good" teachers, but that it is not for "problem teachers."

Skill Use: "In one way or another" Fred has already implemented most aspects of the course. He has done extra work on and implemented the questioning strategies himself. He has also already implemented the coaching strategies with the help of another administrator who had already taken the course. He himself was coached as he pre-conferenced a teacher, observed the teacher in class, and post-conferenced on the observations. Next, he and his fellow administrator will reverse roles. He has found the exercise beneficial. He intends to continue coaching his teachers.

Plans: Fred plans to do further research on the questioning strategies and then present the information to his staff. He would also like to see the KTAV learning styles information as a topic at the teacher institute.

Course Strengths: The strengths of the course for Fred included 1) the interchange of ideas on the skills and practices. He personally enjoyed the discussion more than the theory particularly on the interview techniques, the questioning techniques, and the learning styles information. 2) The instructor handled difficult situations well. Fred watched and analyzed the instructor's actions to reach the conclusion that the instructor was using the skills he was teaching. the instructor "kept to his ideal" and Fred was aware of the skills as they were used. 3) In the organization of the material, "There was a definite format with a wide selection of backup materials readily at hand. The course provided a wealth of information."

Course Weaknesses: Fred did not like the nine-hour days. He would have preferred to take the course in a summer workshop over four or five consecutive days.

Participant: Gary Green

Central Office

Previous Experience: Gary has many years experience as an elementary school principal and at the superintendency level. He is highly experienced in teacher observation and report writing. He had previous exposure to some of the material on coaching.

Beliefs: Gary found the course "confirming and enlightening" as it provided names for things he "knew and did." He says the course raised his awareness of the techniques and served as a refresher for many of them. Gary is particularly pleased that the administrators "have now established a common language" that they can use to "talk about the lack or excellence of techniques." He noted that different professionals have had different levels of unique language and this adoption of a common language will allow them to be "in tune" with one another.

Gary believes that the communication skills taught in the course will allow both participants in a dialogue to have an opinion and will help discussions "get at topics in depth." Referring to the "receiver-sender" process of communication, he says that, "The sender cannot just send out a statement." This is especially true in coaching where one wants "to affect the belief system. These skills help do that." He says the course "made me realize the difficulty of changing belief systems." It will "help me bring about buying in as it gave me methods to go in small steps, to pick on even the smallest thing I can find. I can identify a base to build on. There is a need for patience. Coaching is a means to reach the final goal you have in mind." He notes that in learning new things he has needed time to question and challenge the ideas so that he recognizes that in getting others to implement new ideas, "They too need the opportunity to derive meaning. To go through the frustration, the rejection, to consult, read and bounce off ideas on others."

Skill Use: Gary has consciously applied some of the communication skills in discussion with some teachers. He feels he was successful in eliciting more information, the use of the skills helped him to feel more comfortable, and he believes the other person felt more comfortable also. Gary feels better prepared to meet resistance using the communication skills from the course although to date he has not tried to remove the "but" from his support statements.

Plans: Gary believes that his effectiveness with the skills will increase as he continues to expand in his thinking, makes the skills part of his writing as well, and adapts the skills to become his own. He will do "subtle coaching" with his colleagues and will work to be able to use them in spontaneous situations.

Course Strengths: Gary identified five strengths of the course. In order they are: 1) the instructor. Gary analyzed the instructor's teaching as a colleague and found consistency between what he practiced and what he preached. The instructor "made the course exciting by living example." Gary was waiting for a slip up and did not find one. He says, "The instructor consistently lived up to his teaching. This consistency had a positive effect." 2) in the meaningful content. It was practical. Gary does not believe in "recipes" and liked the fact that the course "emphasis was on take and adapt." 3) in the sharing and informal discussion. The opportunity for sharing discussion was an opportunity to grow. 4) in the immediate practice. 5) in the demonstrations and the model to follow.

Course Weaknesses: The weaknesses he believes may have been in having too much information for a thirty-six hour course. A few more hours wouldn't hurt. Gary found "nothing wrong with the content, the teaching or the class. There was a need to spread the information out for retention." He conclude by "Thinking out loud" that it may have been possible to have participants take small bits of the course information and report back on them for the class.

Participant: Harry Horner
Central Office

Previous Experience: Harry has twenty one years administrative experience at the elementary school and Central Office level. He is highly experienced at teacher observation, conferencing and report writing.

Beliefs: Harry found that the discussion periods and the role play situations helped to confirm his beliefs in a long term coaching and conferencing process for assisting teachers. The course brought home to him the need for time and the need for a formalized, structured approach. Harry found that the course put him in situations where his attitudes came through. However, he felt safe and comfortable with this group of close colleagues. The course may have been more threatening had there been more classroom teachers present.

Harry states that the course has allowed him to better identify specific teaching behaviours particularly from the effective teaching portions of the course. The conferencing skills, he says, have made him more able to meet resistance and to deal with the "defensive". He is more conscious about how he is coming through to others and tends to look at their strategies.

Harry says that the value of the course for him was in helping him move from "gut feelings to specifics" in identification of teaching behaviour, and in giving him "labels, ways to say" what he has seen. Also "very important to the course, one of the highlights" were the verbal and non-verbal communication skills which "brought to the surface an awareness of things we must be conscious of in dealing with teachers". Harry calls these skills "double barrelled, a major part of the course" because they are things we want to see in teachers and also techniques we want to use in coaching.

Skill Use: Because of the timing and the nature of his job responsibilities in May, Harry has not had the opportunity yet to try coaching this year. As a way to keep in touch with the communication skills, Harry now watches television interviewers such as Barbara Frum with an attempt to "define the strategies the interviewer is deploying". He has identified very specific techniques for "control" of an interview "and for getting at very specific information".

Plans: Harry intends to review what he has learned and expects to be able to use it next year when he expects to apply it to coaching other administrators. He says he "will be more effective in observation and in setting the tone" of a conference.

Course Strengths: The course strengths identified in order by Harry include: 1. the communication skills. They are "critical to both teachers and administrators".

2. the effective teaching strategies. "We must have tools and be expert" with them.

3. the coaching models. With these concrete models Harry is comfortable adapting them to suit his needs. He has in the past used what are combinations of these models. " The documents were well organized and will be valuable."

4. the role play and the reinforcing of skills and knowledge. Harry says there was a wide variety of materials and the instructor was "versed in the content and practicing the skills during the course". The instructor's knowledge base added "credibility and ensured enthusiastic learning".

Course Weaknesses: Harry identified as a weakness of the course his "frustration with the time line and that was partly my doing". He found the course too compacted and would have liked more time for expansion and discussion.

As additions to the course, Harry would like more time for absorption and says that it is "essential that all of our administrators go through the course." He can see benefits in having them take the course in administrator-teacher pairs with opportunity to practice the skills between sessions.

Participant: Iona Innis

Elementary School Assistant Principal

Previous Experience: Iona Innis has three years experience as an administrator and has during that time been involved in several staff improvement projects. Iona has a great deal of experience in teacher observation and in conferencing about that behaviour. She has a background in counselling and is highly regarded by her colleagues. Iona has also had previous exposure to much of the information on effective teaching techniques and has taken Project T.E.A.C.H. so was aware of the communication skills.

Beliefs: Iona found even in the pre-test a tendency to see the negative behaviours first, a point of view which she did not find comfortable as she wants to see herself as a positive person.

The course has made Iona more conscious of her teaching and conferencing behaviours. She found that the early part of this course provided her with an opportunity for review of the skills she had learned in Project T.E.A.C.H. The course provided Iona with some insights into ways in which she could continue to develop her own professional style. It also gave her the opportunity to discuss techniques and research based materials with her colleagues.

Skill Use: Iona now thinks more about her communications skills as she is conferencing; she makes conscious use of the skills more frequently and is trying to be a better listener. Iona was involved in an improvement project with a teacher when the course began. She says she wishes the timing of this project had been different as she would have handled the conferencing differently. Iona says she would have been more positive and would have led her to her own realizations more. She attempted to change the focus on this project part way through and plans on resuming the project next year with a coaching focus. She is adapting the material from the course to fit with the other material she has and is adding to it. During our interview she shared a recent journal article that supports the use of the KTAV techniques from the course.

Plans: Iona works with teachers for improvement and plans on adapting her approach to reflect what she has learned.

Course Strengths: The strengths of the course as identified by Iona include:1. the lay out of the course with programmed learning, repetition and a variety of methods. She calls it a "safe way to learn."

2. the modeling of the instructor. She says "You practice what you preach."

Course Weaknesses: The weakness of the course she identified was the timing. She says it would have been better spread over twelve three-hour sessions and offered in the fall of the year.

Participant: James Jackson

Senior High School Assistant Principal

Previous Experience: James has three years experience as an administrator at the senior high school level. His designation changed midway through the course and he will be returning to the classroom full time next year. His focus on the course changed at that time as well to place more emphasis on the effective teaching practices and less on the coaching.

Beliefs: James was quite aware of his own beliefs about teacher observation before taking the course. He looked on it as a tool to promote teacher effectiveness, and found no confirmation or clash with his previous values. James did comment that teacher observation has in the past been "too often gut feeling".

He says the course has "changed me by exposure". The course will change his teaching first. He notes that it has given him "incentive to think before teaching". He feels "good" about the effective teaching strategies", the teaching "tools" especially the KTAV information. Were he to be able to continue in his designation he says the course has given him the "observation, analysis, discussion and knowledge" skills to work with teachers to transfer better teaching practices. The communication skills have made him "slightly better able to direct" a conference for improvement.

James is a bit confused about the value of the course for him. He got some of what he wanted from the course but having his designation changed turned the focus of the course for him. He says it was "time well spent." There was "new learning which continued despite the designation change." His conclusion about the course was that it "should be a C.I. course at the University".

Skill Use: To date James has restricted his use of the skills to an analysis of his own teaching.

Plans: Understandably put out by his designation change, James is unsure of what use he will be able to put his coaching skills next year.

Course Strengths: The strengths of the course for James were:

1. identification of effective teaching practices.
2. improved communication skills.
3. the non-verbal communication information.
4. the SDLOC lesson planning process

Course Weaknesses: The weakness of the course was in the nine hour long sessions which offer too much at one time. He would prefer to take it in a summer session where he would have more time to practice.

Participant: Kevin Kramer
Junior/Senior High Principal

Previous Experience: Kevin has eight years administrative experience at the junior/senior high school level. He has had his staff actively involved in a professional improvement program and is highly experienced at teacher observation, report writing and conferencing.

Beliefs: Kevin received no real surprises as he examined his own style and nature throughout the course. He recognized in himself a lack of patience, an "up front" manner, and a desire to move quickly. His frustrations with these manners was in knowing"that you were right - and yet!." He has always believed that we "should be getting the staff to be the best they can be" and says "We have built on strengths and also a few areas of weakness for work." Before taking the course he observed classrooms looking for "a positive learning atmosphere - looking at kids for learning and for the opportunity to learn; looking at teachers for basic student management." Kevin says that the course has given him the tools to adapt; he can apply some things. He says, "I think I can now take some specifics and say this is or is not going well because you are or are not doing this." The course has enabled him to change his observation focus to specific behaviours. The course had value to Kevin in exposing him to "lots of things that I honestly didn't know and others that I knew and didn't have names for." He says that the change in his observations to specifics "has to be good." He felt that the long sessions did not distract from the whole course for him. He would like to have his staff exposed to it.

Skill Use: Apart from analyzing his own teaching practices, Kevin has not yet applied the skills.

Plans: He will be reviewing the course materials this summer with a mind to implementation of the techniques. After taking the course he looked at the observation form in use in his school and says that he will be redesigning it this summer. He says that "There are skills and techniques that have to be applicable" , they "can't help but contribute because the concept here is important and open and honest" and he knows "that it is right". He is exploring ways to expose his staff to the effective teaching practices.

Course Strengths: The strengths of the course for Kevin included:

1. the instructor. The material was well presented; the instructor knew what he was doing, was well prepared and provided a good learning atmosphere.
2. the opportunity for interaction.
3. the variety of activities. Nothing bogged down, the course was fast paced and provided enough different information.

Course Weaknesses: The weakness of the course he feels may be in that the course structured with administrators only leaves them "self-motivated". It may be better offered with administrator-teacher pairs with an immediate practical application.

Participant: Larry Lewis
Elementary School Principal

Previous Experience: Larry has thirteen years administrative experience at the elementary, junior high, and central office levels. He is highly experienced at teacher observation, reporting and conferencing. He has some experience with many of the techniques taught in the course and has previously shared some similar material with his staff. He studied teacher supervision in England, and later in his Master's program in Oregon.

Beliefs: Larry said that his expectations going in to the course were high as he had been intrigued at the introductory session. He was comfortable as his own beliefs and attitudes surfaced because he had the opportunity to contrast what he had learned in previous training with what he was learning in this course. He says, "The process - the coaching process - is quite a bit different although I've been involved in conferencing and things like that with Acheson down in Oregon. The approach was different."

Larry says that the course has contributed to his effectiveness in "several areas" . He states that the course has helped him to move "from telling to leading collegiality". In the past he "would have gone in and done a task analysis and presented them with the data, and said 'Okay, now what do you think ?' and quite honestly I haven't found that to be as effective as I would have liked." He is now "more able to lead" the teacher to make his/her own conclusions based on the observed behaviour. He feels that he still has room to grow, but that the course has given him a starting point. Larry says that prior to taking the course he had only a "basal knowledge" of the effective teaching techniques and that this course has provided him with a "fair amount of learning". He has adequate resources to refer back to and intends particularly to refer back to the SDLOC and the questioning techniques information.

The course had value to Larry in expanding his knowledge of effective teaching techniques and in improving his communication skills such that he has more control of a conference outcome without being in complete control of the conference. He would encourage others to take the course. He says that he "liked the exposure to it first (before his teachers) because it exposes a lot of yourself". He did not mind giving up his Saturdays.

Skill Use: Larry has not yet had the opportunity to put the course skills to work. He feels he has adequate references to get started. Now "it is a matter of using it." He also says, "You have to use it, otherwise there is no point in taking it."

Plans: Larry plans on working with his assistant principal to expose the staff to much of the material from the course. He plans on coaching. Within the articulated program in his school he expects to use the course materials to help the teachers with organization and planning. In discussion he showed how each portion of the course would fit with the program. He intends to pursue learning more about some of the topics

Course Strengths: The strengths of the course to Larry included:

1. the modeling of the instructor. Early on he and another participant began analyzing the actions of the instructor to see the skills in use.

2. getting to know the other administrators better. Larry like the collegial, enjoyable, relaxed atmosphere of the course.

Course Weaknesses: The weakness of the course for Larry was the timing. He would have liked more time for practice and found that having the SDLOC process come on the last day meant it was not repeated. He can not identify anything that he would like added.

Participant: Michael Musselman
Secondary School Principal

Previous Experience: Michael has tried several times in the past to work with teachers for improvement. He noted that he has tried the collegial approach first and found no change in the teacher. On the second approach he has been more directive. He stated that he "cannot be totally collegial or totally a teacher supporter."

Beliefs: Although Michael believed that he basically was aware of his style going in to the course, he said that he is "more authoritarian" than he thought. He said, "I am not sure that I have the patience to make time." He stated that the course has given him an excellent framework for staff improvement, that it is good "ammunition - not a blunt instrument" that "can make proposals to change sound credible." It has also provided a precise vocabulary and terminology. However he says his "pragmatism" will allow him to use it only when he "can create the opportunity." Michael does not believe that the course material will apply to a large number of teachers as his priorities are to work first with teachers at a "survival level" and then with "teachers who are adequate - could be better but... ." He said that teacher improvement "is very much like discipline. People in crises occupy 90% of the time even though they are 10% or less" of the teachers. The "school level administrator is tied up with the 10% in crisis" and his "time is shot." Michael said he does not find he "can convincingly use these approaches if the teacher is not interested in teaching." He doesn't "have time to spend on developing" these people. He believes coaches should be recruited from staff, from other administrators, and from outside assistants.

Michael noted that he knows that his own communication skills needed improvement, "especially in conferences" and that as a result of the course he will do more paraphrasing and try to reach concensus more. He is also now more aware of body language.

He says, "It was a good course. There was never a time I felt bored - sometimes tired."

Skill Use: Michael made no mention of using the skills to date.

Plans: Michael at first believed that he would become involved in a coaching program only with teachers who came to him "facing burnout, feeling frustrated, finding teaching not enjoyable" or if "there are people who talk to others second hand, people genuinely concerned" who ask him to become involved. After reviewing the course materials he initiated a coaching program with two teachers in his school.

He is interested in following up on the resistance meeting skills and the agenda skills. He stated that they "are not in my head" yet.

Course strengths: The course strengths indicated by Michael include:

1) the research articles which could also be distributed to teachers, 2) the expertise of the instructor, 3) the course appeal to the learning styles of all participants with a variety of approaches and 4) the relevant material which clarified analytical behaviour .

Course Weaknesses: Michael saw the weakness of this course in it being spread over too many weeks. He would have preferred a solid block of time.

Participant: Ned Neiderhaus
Elementary School Principal

Previous Experience: Ned has four years experience as assistant principal at the elementary/junior high school level. He was promoted to principal half way through this school year. His experience at teacher observation and report writing is limited.

Beliefs: Ned was comfortable with his view of himself and with the idea of helping other teachers. He called teaching "a helping profession" and believes that the course gave him skills to help "form a bond with a person." He believed that a feeling of compassion is necessary in teacher observation and that his interaction with teachers is probably the most important thing he does. He called the administrative role as instructional leader, "the absolute quintessential function of administration." From his experience teacher observations have generally had inadequate lead-up, inadequate follow-up, and the reports have tended to be full of "useless comments and generally zero in on one weakness." He noted that there is always something a person can identify for improvement , saying that even "If you are shovelling manure, somebody will come and tell you how to do it." As teachers are professionals they need something along the lines of coaching to provide peer interaction for growth. He felt that the use of coaching gives feelings of mutual respect and techniques for development. He recognizes that change is a hard thing to accomplish saying, "It takes constant reinforcement." Ned stated that before taking the course he was allowing too much for the teacher's professional abilities. He said that, "almost everyone is aware that if they are left alone in the classroom it is very easy to stagnate. He noted that there is a positive aspect to teacher observation for the teachers who appreciate having somebody see the good things they are doing. He said, "That's part of the reward. They want someone in to help them. They want someone who is helping, not just someone judging." Ned said that prior to the course he would observe a teacher and say, "Gee, she's doing something great but I don't know what it is exactly." The course has given him "A hook to put experience on. I can categorize certain behaviour and use it to determine the value."

Ned liked the course. He stated that many administrators enter a classroom with expectations of what they will see and then see only that. He said, "My experience with administrators who have not had a course like this is they will often like or dislike a person based on nothing."

Skill Use: Ned said that with the change to a new school immediately prior to taking the course he had not used the skill much yet. He has been in the classrooms a great deal as part of building a rapport with the staff. He noted that he is "still noticing weaknesses more than strengths, but I know that building rapport comes first." He had not yet consciously implemented the skills to the extent where he could say, "I'm using a support statement and so on ..."

Plans: Ned said that the course gave him material to use to keep growing and revealed plans to review the materials in August so that he can embark on a coaching program in the fall.

Course Strengths: Ned identified three strengths of the course: 1) the content was "immediately useful in the principal area of need for myself growth as an administrator," 2) the sincerity of the instructor who extended himself to help each person complete the course, and 3) the format was good. He enjoyed having the course on Saturday all day.

Course Weaknesses: For Ned the weakness of the course was the busy time of year in which it was offered, although he said having it every second week was a help. The course seemed a little rushed to him; he said there seemed to be a lack of time to do the reading. He would like to see the course offered with teacher/administrator pairs.

Chapter Five

Data Interpretation

This chapter will interpret the information found in the data collection. The prime focus of the chapter is to see what changes have taken place in the participants as a result of taking the course Coaching Teachers To Higher Levels of Effectiveness. First, the pre-test and post-test answers relating to the course content will be examined to identify what the participants indicate they have learned or what changes in practices they have undergone. Second, the results will be interpreted in subgroups by amount of experience, school level, level of educational training, and by administrative position. Third, key themes will be identified from the participant log summaries, and last, key themes from the profiles will be identified.

Course Content

Effective Teaching Techniques. Bruce Joyce and Beverly Showers (1980:379) noted that "teachers are wonderful learners." A glance at table 7 and table 8 shows that this is true for the administrators in this course as well. There was a significant change in their knowledge on nine of the twelve content items from the course, and on all six of the formative practice items. For discussion in this chapter, the content items have been broken into five major groups: questioning, appropriateness of teacher responses to student answers, teacher nonverbal behaviour, learning styles - KTAV, and perceptory learning system - SDLOC.

Questioning. Questions 1, 2 and 3 of the pre and post tests dealt with this section of the course. Question 1 judged participants' ability to judge the existence of a variety of question levels when observing a teacher, question two the use of clear and understandable questions, and question three the use of pause periods. Table 13 shows that the administrators with six or more years of experience found an increase in their ability to judge the existence of all three items when observing a teacher significant beyond 0.05. No other group showed a significant increase although item 3 on pause periods showed an increase significant beyond 0.05 for the total sample.

It is possible that the administrators with six or more years experience have been away from the classroom longer than the others and have had less exposure to the most recent research on questioning. They may also not have been part of the large group (approximately 80) of administrators and teachers who took the *T.E.S.A.* course in the division in 1984. The T.E.S.A. course also includes a large section on questioning techniques and this may also explain why more significance is not evident on these questions. The fact that the training in pause periods in this course differs slightly from T.E.S.A. may explain why it alone appears significant to the total group.

Appropriateness of Teacher Responses to Student Answers. Only question 4 on the tests referred to this topic. It is not trained as a separate item in the course but is referred to in several research items and in discussion. Table 52 shows that prior to the course principals were much more able to judge this item than vice-principals, possibly due to their generally greater length of experience in teacher observation. The positive effect of experience is supported by Table 19 which shows that even following the course, the administrators with six or more years experience are significantly more able to judge (beyond 0.05) the item than those with less experience.

Teacher Nonverbal Behaviour. Questions five and six asked participants to judge first their ability to determine the impact of teacher nonverbal behaviour on class momentum, and then their ability to judge the deliberate and purposeful teacher use of nonverbal behaviours. Table 7 shows that the changes in participants' ability to judge both items improved significantly as a result of the course. Both increases are significant beyond 0.01. One is forced to wonder about the lack of impact of this section on the secondary school administrators.

On question 5, impact of nonverbal behaviour, both principals (table 46, significant beyond 0.05) and vice-principals (table 49, significant beyond 0.01) showed an increase in ability.

Highly experienced (table 13) and less experienced (table 10) administrators both showed an increase in ability significant beyond 0.05. Elementary school administrators showed an increase significant beyond 0.01, secondary school administrators showed no significant increase (table 25). Administrators having only a Bachelor degree showed an increase beyond 0.01 (table 34).

On question 6, deliberate use of nonverbal behaviour, more experienced administrators (table 13), elementary school administrators (table 22), administrators with bachelor degrees only (table 34), and vice-principals (table 49) all showed increases in ability significant beyond 0.05. No individual groups showed an increase significant beyond 0.01.

Learning Styles - KTAV. Two questions asked participants about learning styles. Question seven asked participants to rate their ability to judge the use of varied KTAV strategies, and question eight asked them to rate their ability judge the matching of KTAV strategies to students' learning styles. On both questions the total sample showed an increase in ability significant beyond 0.01.

On question seven, the varied use of KTAV strategies, principals (table 46) and vice-principals (table 49) both showed an increase in ability significant beyond 0.05. Both highly experienced administrators (table 13) and administrators with less experience showed an increase significant beyond 0.01 as did elementary school administrators (table 22).

On question eight, the matching of KTAV strategies to student learning styles, administrators with 0 - 5 years experience (table 10) showed an increase significant beyond 0.05; those with more experience (table 13) showed an increase beyond 0.01. Secondary school administrators (table 25) showed an increase beyond 0.05 and elementary school administrators (table 22) an increase beyond 0.01. Administrators with bachelor's degrees only (table 34) showed an increase in ability beyond 0.01, while those with Master's degrees or better (table 37) showed an ability increase significant only beyond 0.05. Principals (table 46) and vice-principals (table 49) both showed an increase significant beyond 0.01.

This was the section most enjoyed by the participants in the program. It may be that they were able to see an immediate link between common practice, common sense, and research. For years teacher supervisors have been expecting teachers to use a variety of activities in the teaching of a lesson. Now, they can offer a strong set of guidelines to use in choosing those activities and show teachers how to use them with a purpose.

Perceptory Understanding of New Information - SDLOC. This section had the largest number of questions on the tests, four, because it divides naturally into a four stage process. Question nine asked about participants ability to judge the use of similarities and differences in information presentations. Question ten asked about ability to judge the use of labelling of new information. Question eleven asked about ability to judge the use of new information at a level that demonstrates comprehension, and question twelve asked about the ability to judge new information combined with previously known information. On the total sample (Table 7) all four questions showed an increase in participants ability significant beyond 0.01.

On question 9 principals showed a greater ability to judge the use of similarities and differences than vice-principals, (table 55) significant beyond 0.05. Experienced administrators (table 13) showed an increase in ability significant beyond 0.01, as did elementary school administrators (table 22), administrators with bachelor degrees only (table 34), and principals (table 46).

On question 10, the use of labelling for new terms, experienced administrators (table 13), and less experienced administrators (table 10) both showed an increase in ability significant beyond 0.01. Administrators with bachelors degrees only showed an increase in ability beyond 0.01 while those with Master's or better increased to a level significant only beyond 0.05. Elementary school administrators (table 22) and principals (table 46) showed increases significant beyond 0.01.

On question eleven, the use of new material at a level showing comprehension, experienced administrators (table 13) and elementary school administrators (table 22) showed an increase in ability significant beyond 0.01. Administrators with bachelor's degrees only (table 34) and principals (table 46) showed increases significant beyond 0.05.

On question twelve, the use on new material combined with known material, experienced administrators (table 13), elementary school administrators (table 22), and principals (table 46) all showed increases significant beyond 0.01. Administrators with bachelor degrees only showed increases significant beyond 0.05.

This item was dealt with on the last day of the course, and there was some concern expressed by participants about the fact that unlike the other sections of the course, they would not return to SDLOC for a review. This is another item on which there is a link between what appears logical and research. It provided the participants with guidelines they could use to help teachers with lesson planning.

Formative Work

Six questions asked about the participants intentions to work formatively with teachers with specific goals in mind. For every question the total sample showed an increase in intentions. This result was expected as volunteers taking a "teacher coaching" course must have intentions to work with teachers for improvement. The strength of the results may suggest the determination of the participants to use what they have learned.

On question one, an intention to help teachers identify their strengths, the total sample (table 8) showed an increase significant beyond 0.01. Vice-principals as a distinct group (table 50) also showed an increase significant beyond 0.01. Experienced administrators (table 14), elementary school administrators (table

23) and administrators with bachelor degrees only (table 35) all showed increases significant beyond 0.05. This amount of significance represents the positive nature of all of the work coaches are trained to do in the course. All have been told in the past to "Be Positive!" This course tried to show them how.

Question two, identification of teacher weaknesses is the only question in this section on which the total sample showed an increase significant only beyond 0.05. Elementary school administrators (table 23) and administrators with bachelor degrees only also showed increases significant beyond 0.05. Vice-principals (table 50) showed an increase in ability to identify weaknesses significant beyond 0.01. On the pre-test experienced administrators showed a stronger inclination to identify weaknesses than less experienced administrators (table 17, significant beyond 0.05). This stronger tendency did not appear on the post-test because the ability of lesser experienced administrators had increased dramatically.

Question three dealt with an item closely related to question two, the identification of areas for instructional growth. The total sample experienced significant growth (table 8, beyond 0.01). Once again the pre-test showed the experienced administrators having more strength (table 17, significant beyond 0.05). However, table 11 shows growth resulting from the course for administrators having five years experience or less significant beyond 0.05. Table 47 shows growth in ability for principals significant beyond 0.05, and table 50 shows growth in ability significant beyond 0.01 for vice-principals. Elementary school administrators (table 23) and administrators having bachelor degrees only showed growth significant beyond 0.01. The appearance of more significant growth in question three than in question two may result from the positive focus of the course which is intended to help coaches identify growth potential as a strength rather than as a weakness as asked for in question two.

Question four asked participants about their ability to help with the improvement of instruction in a specifically identified area. Once again the total sample experienced growth significant beyond 0.01 (table 8). Principals (table 47) experienced growth significant beyond 0.05 and vice-principals (table 50) growth significant beyond 0.01. The difference in growth may be accounted for by the stronger starting position of the principals. Table 56 shows that at the end of the course, principals felt significantly more able than vice-principals (beyond 0.05) to work with a teacher for improvement in a specifically identified area. Table 14 shows that experienced administrators felt the same growth and table 23 shows that elementary school administrators felt growth significant beyond 0.01.

Although administrators with bachelor degree only experienced growth significant beyond 0.01 (table 35), the administrators with Master's degrees or better still feel significantly more able (table 44, beyond 0.05) than them to work for improvement with a teacher on a specifically identified topic. This may reflect previous training in teacher supervision taken by these administrators in their Master's programs.

Question five tested the participants' perceptions of their ability to overcome resistance. Again the increase in growth in the ability of the total sample (table 8) was significant beyond 0.01. Experienced administrators (table 14) showed growth significant beyond 0.01, while less experienced administrators (table 11) experienced growth significant beyond 0.05. Similarly, administrators with bachelor degrees showed growth significant beyond 0.05 and better educated administrators with Master's degrees or better showed growth significant beyond 0.01. Elementary administrators (table 23) and principals (table 47) also experienced growth significant beyond 0.01. It would appear that highly-educated, experienced, elementary school principals gained the most in terms of learning to meet and defeat teacher resistance.

Question six asked about participant ability to help a teacher expand a lesson design to include improved instructional techniques. Although once again the total sample showed growth significant beyond 0.01 (table 8), only two subgroups showed significant growth. Elementary school administrators (table 23) and administrators with bachelor degrees only (table 35) showed growth significant beyond 0.50.

Priority of Instructional Leadership Role

Question four of the pre-test and post-test asked participants to rate the priority that they feel instructional leadership has as part of their administrative role. Generally administrators rated this aspect of their role highly. On the pre-test, as seen on table 3 only three participants rated the priority below a four on a 0 - 5 point scale. One participant rated it 1; two rated it 3. The mean was 4.07. On the post test, table 6, all rated it as either 4 or 5. The mean was 4.57.

Only one subgroup showed a significant increase in attitude concerning the priority of instructional improvement as part of their role. Table 45, shows that administrators having Master's degrees or better rated the priority higher than those having only bachelor degrees. This may be an accident resulting from the low N for Master's degrees in the course. All participants with Master's degrees rated instructional improvement as a 5.

Subgroup Analysis

Experience. The sample group was divided into two smaller groups for analysis to determine who gains most from a course of this sort. An arbitrary division was made of those who have five years experience or less compared to those with six years of experience or more. Some interesting results appeared that show clearly the learning that comes with experience. They also show the ability of the course to approximate and provide experience in some of the areas covered in it.

Tables 10 and 11 showed that the administrators with the least experience experienced significant growth in four content items and two formative improvement items. They showed growth significant beyond 0.05 on question five, identifying the impact of non-verbal behaviour on classroom momentum, and on question eight, the matching of KTAV strategies to students' learning styles. Question seven, the varied use of KTAV strategies was significant at 0.01. Question ten, showing growth in the use of labelling for new information also was significant beyond 0.01. In section two, formative work for improvement growth was significant beyond 0.05 for question three, identification of areas for instructional improvement, and beyond 0.01 for question five, the ability to overcome resistance and to help teachers accept new ideas.

The more experienced administrators (tables 13 and 14) showed significant growth in eleven content items and three formative improvement items. They showed growth significant beyond 0.05 on questions one, the use of a variety of levels of questions; two, the use of clear and understandable questions; three, the use of pause periods with questions; five, judging the impact of nonverbal behaviour on classroom momentum; and six, identifying deliberate and purposeful use of teacher non-verbal behaviours. Growth significant beyond 0.01 was evident on question seven, identifying the use of KTAV strategies; question eight, identifying the matching of KTAV strategies to students' learning styles, question nine, identifying the use of similarities and differences to build a context for a lesson; question ten, identifying the use of labelling for new terms; question eleven, identifying the use of new material by students at a level that shows understanding; and question twelve, identifying the use by students of new information integrated with previously known information. In section two, growth in their willingness to work with teachers for improvement was shown on question one, an increased ability to identify teacher strengths, significant beyond 0.05; question four, increased ability to work for the improvement of instruction in a specifically identified area, significant beyond 0.05; and question five, increased ability to overcome resistance to change significant beyond 0.01.

Table 17 showed that the more experienced administrators began the course with a significantly stronger ability to identify teacher weaknesses and to identify areas for instructional growth (beyond 0.05). At the end of the course, these differences were much smaller and no longer significant.

Tables 19 and 20 showed that the more experienced administrators gained significantly more than the less experienced administrators in three areas. In part one, question four, they showed a greater increase in ability to match the appropriateness of teacher responses to student answers. In part two, question four, the intent to work with teachers for the improvement of instruction in a specifically identified area, at a significance of 0.01. In question five, the ability to overcome resistance to change they showed improvement significant beyond 0.05.

It appears that two somewhat contradictory forces are at play here. On entering the course, the experienced administrators showed strengths in formative supervision work that could be attributed to their experience. They also appear to be further from the classroom and more in need of the technical effective teaching practices material than the less experienced group. By providing both topics and allowing a great deal of share time, the course seems to have met the needs of both groups.

School Level. Unquestionably, the elementary school administrators gained more from the course than the secondary administrators. Different results may have resulted had there been a larger number of secondary administrators. Only four enrolled in this course, and one of them had to withdraw for personal reasons before completing. This small number of secondary administrators does not allow conclusive information about learning possibilities for secondary administrators taking this course.

Table 22 shows that in part one the elementary school administrators experienced growth significant beyond 0.05 on question 6, the deliberate and purposeful use of nonverbal behaviours, and growth significant beyond 0.01 on question five, the impact of nonverbal behaviour on class momentum; question seven, the varied use of KTAV strategies; question eight, the matching of KTAV strategies to students' learning styles; question nine, the use of similarities and differences to build a lesson context; question ten, the use of labelling for new information; question eleven, the use of new material by students at a level that shows it is understood; and question twelve, the use of new material integrated with previously learned material. In part two, formative work with teachers, table 23 shows they experienced growth significant beyond 0.05 on question one, identification of teacher strength; question two, identification of teacher weaknesses; and question 6, expansion of a lesson design to include improved instructional techniques. Table 24 shows they experienced growth beyond 0.01 on questions three, identification of areas for instructional growth; four, the improvement of instruction in a specifically identified area; and five, the ability to overcome resistance to change and to bring about acceptance of new procedures.

The absence of significant growth in the questioning topics may be explained by the high degree of knowledge these administrators already possessed about questioning. At least two of the administrators are highly familiar with Bloom's taxonomy of questions and have been working with their teachers to integrate full use of the taxonomy into their school. Others were enrolled in the T.E.S.A. program in 1984 and have already been trained in the use of effective questioning techniques.

The secondary administrators showed growth significant beyond 0.05 on only one item. Table 25 shows that on part one, question eight secondary administrators significantly better able to identify the matching of KTAV strategies to students' learning styles.

Table 31 shows that elementary school administrators completed the course significantly ahead of secondary school administrators on two items. On part one, question two, identification of questions that are clear and understandable to the students, and on question ten, identification of the use of labelling for new information, elementary school administrators showed a final result higher than secondary administrators significant beyond 0.05.

It is interesting to note that elementary school administrators registered significant change on fourteen items compared to one item for secondary administrators. It is not reasonable to suggest that secondary teachers are not in need of formative work. Therefore, the question may lie in the willingness of secondary school administrators to provide it.

Educational Training. Once again participants were divided into two groups, one group of participants having bachelor degrees only (N= 10), and the other group having Master's degrees or better (N= 4). Once again, the small number of participants in the second category makes it difficult to make probable comments about others.

Table 34 shows that participants having bachelor degrees only experienced growth beyond 0.05 on part one, question six, identification of the deliberate and purposeful use of nonverbal behaviours; question eleven, identification of the use of new material at a level that demonstrates understanding; and question twelve, identification of the use of new material integrated with previously learned material. They experienced growth beyond 0.01 on question five, identification of the impact of teacher nonverbal behaviour on classroom momentum; question seven, identification of the varied use of KTAV strategies; question eight, identification of the matching of KTAV strategies to students' learning styles; question nine, identification of the use of similarities and differences to build a context for a lesson; and question ten, identification of the use of labelling for new terms. Table 35 shows significant growth in all items related to formative work with teachers. It shows growth significant beyond 0.05 on question one, the identification of teacher strengths; question two, the identification of teacher weaknesses; and question six, the expansion of lesson design to include improved instructional techniques. It shows growth beyond 0.01 on question three, the identification of areas for instructional growth; question four, the improvement of instruction in a specifically area; and question five, the ability to overcome resistance to change and to promote acceptance of new ideas.

Tables 37 and 38 show participants having Master's degrees or more experiencing growth significant beyond 0.05 on part one, question eight, identification of the matching of KTAV strategies with students' learning styles; question ten, identification of the use of labelling for new information; and part two, question five, the ability to overcome resistance to change and to promote acceptance of new procedures.

When growth is compared between those who have a bachelor degree only and those having a Master's degree or better, on only one item is there a significant difference. Table 44 shows that participants having a Master's degree or better gained more than those having bachelor degrees only significant beyond 0.05 on part two, question four, the improvement of instruction in a specifically identified area.

Administrative Position. Both principals (N= 7) and vice-principals (N= 4) who were enrolled in this course made significant gains although not always on the same items. No conclusions were drawn for superintendency personnel because of the small number (N= 2) in the course.

Tables 46 and 47 show that principals experienced significant growth on eleven items. It was beyond 0.05 on part one, question three, identification of the use of pause periods in questioning; question five, identification of the impact of teacher nonverbal behaviour on classroom momentum; question seven, identification of the varied use of KTAV teaching strategies; and question eleven, identification of the use of new material by students at a level that demonstrates understanding; and part two, question three, the identification of areas for instructional growth, and question four, the improvement of instruction in a specifically identified area. They show also growth significant beyond 0.01 on part one, question eight, identification of the matching of KTAV strategies to students' learning strategies; question nine, identification of the use of similarities and differences in the building of a lesson context; question ten, identification of the use of labelling for new terms; and question twelve, identification of the use of new material integrated with previously learned material; and part two, question five, the ability to overcome resistance and to promote acceptance of new procedures.

Vice-principals experienced significant growth on eight items. Tables 49 shows growth significant beyond 0.05 on part one, question six, identification of the deliberate and purposeful use of nonverbal behaviour; and question seven, the varied use of KTAV teaching strategies. Tables 49 and 50 show growth significant beyond 0.01 on question five, the impact of teacher non-verbal behaviour on classroom momentum; question eight, the matching of KTAV teaching strategies to students' learning styles; and part two, question one, identification of teacher strengths; question two, identification of teacher weaknesses; question three, identification of areas for instructional growth; and question four the improvement of instruction in a specifically identified area.

When pre-test results of principals are compared with pre-test results of vice-principals only one significant item appears. Table 52 shows that principals began the course significantly (beyond 0.05) more able to match the appropriateness of teacher responses to student answers. This ability was no longer significantly different at the end of the course. There were however two new differences. Table 55 shows that principals finished the course with an ability to identify the use of similarities and differences to build a context for a lesson greater than that of vice-principals significant beyond 0.05. Table 56 shows that principals finished the course with a greater intention, also significant beyond 0.05, to work on the improvement of instruction in a specifically identified area .

Question Three: Observation Elements

A glance at the results obtained on question three shows clearly that in their teacher observations the participants are looking for many things different than they were before taking the course. In most instances they name specific effective teaching practices taught in the course as behaviours they will now look for from their teachers. Their answers support their log and interview comments that they now have specific items to look for that will replace the general observations they made previously.

Question Five: Obstacles to The Role as Instructional Leader

There is no clear change in participant answers to this question between the pre-test and the post-test. A look at their answers shows that most still list two prime obstacles, lack of time and amount of paperwork. There does appear to be an awakening awareness of the need to meet teacher resistance to change which is mentioned many more times on the post-test than the pre-test. Another interesting obstacle that appears on the post-test is one participant's perception that there is a "lack of central office encouragement for improvement." This perception does not seem to be shared by his colleagues.

At least two of the participants found it difficult to find obstacles to performing their instructional improvement function. Their answers seemed to suggest that it is simply a matter of their own priorities.

Question Six: Resistance Skills

Participant answers to this question are less clear than would be desirable. However, there is a definite pattern of responses that show the use of the communication skills taught in the course. They are aware of the uses of these skills if still lacking in practice. The other trend apparent in the tests is a change to a more positive and confident outlook. Participants appear to be much more confident about using the background material and the communications skills they have learned to meet teacher resistance.

Question Seven: Teaching Activity Suggestions

Both the Learning Styles information and the SDLOC-Perceptory Learning Process information from the course is evident in the suggested teaching activities given. Some of the participants have made an effort to balance the number of activities with the three learning modalities. Others have tried to show the use of the SDLOC process in their answers. The ambiguous nature of the responses suggests that the question was unclear. The information had limited usefulness beyond suggesting that the participants tried to apply what they had learned to the answers.

Key Themes in Log Summaries

The logs showed participant professional growth as the course progressed. These interpretations and selected quotations also reveal much about participant expectations and their conclusions about the material.

Log One:

Participants revealed reasons for enrolling and expectations from the course. Almost all participants expressed a desire to improve their own insight and skills in teacher supervision. One enrolled because she was asked to, and another enrolled to improve his own teaching skills. Interest was expressed in all segments of the course material as explained in the overview. Topics that did not interest one interested another participant.

Log Two:

The frustrations of participants as they were placed in unfamiliar situations became evident. Edward Evans said, "I felt unprepared for the role play - not fully versed in the skills and knowledge required for the role play."

Log Three:

Participants began to express an awareness of their own values, beliefs, and biases. Michael Musselman said, "The presentation of effective teaching practices has made me aware of certain personal habits that may arouse teachers' defenses." They began to see value in the teaching practices and uses for them. Kevin Kramer said that the course, "has been useful so far because I know what to look for." It will greatly alter my observation techniques in my classroom visits." Denise believed that the skills taught had, "given me some insight into coaching teachers and some direction to pursue. I will use them in the classroom with students, and in the supervision of teachers and parent helpers." The field dependent coaching model was a clear favourite choice of the group because of its flexibility, versatility, and "uncluttered" simplicity.

Log Four:

Comfort with the materials began to appear with an understanding of the utility of the skills. Most participants began to believe in the concept and the process. Fred Foremost said, " My knowledge of effective teaching practices has expanded by putting things that I have known intuitively or from experience into a theoretical framework. Things now have labels and can be categorized. The KTAV and questioning strategies materials are valuable. The course has confirmed many of my personal observations and judgements about what is good teaching." Larry echoed, "My knowledge base is greater than before. I have had a nodding acquaintance with many of these practices, but find now they are falling into place. I found the KTAV stuff great. I've heard about kids having different modalities, but this made sense and I can now buy into it a lot more." He continues, "I've been more aware of the usefulness of coaching instead of evaluation - because of background - both through university courses and experience I've been more prone to evaluation, so I did at first feel a resistance to 'coaching'," and

"It's my own resistance perhaps that needed changing most of all." James said that the course, "forces you to re-evaluate and reassess you own teaching styles and learning modality preference. It is helpful to know where you are coming from in order to assist teachers with growth potential." Boris said, "It has caused a re-examination of my current methods - confirmed some, and will set new directions for me, upon completion off course and reflection." Harry "gained a greater sense of responsibility in acknowledging the position of the person (teacher) being coached and a greater appreciation for the skill required in coaching towards greater improvement."

Log Five:

Participants shared their perceptions of their strongest and weakest areas of study from the course. Once again different participants showed different strengths. An area that was one person's greatest strength was the next person's greatest weakness.

Several participants confirmed their belief in the course and its effect on them. Gary said, "It has clearly helped me to distinguish between evaluating and coaching." Ned said, "It made clear that I now have sufficient tools to do some coaching work." And Michael said, "It made me aware of a different framework I might use (from a personal 'common sense' bias to a knowledge/research based approach." Carla said she had "tangibles to work on. I understood the theories behind the questions."

All participants expressed a willingness to recommend the course to others. Faced with a choice of teacher/administrator combinations as participants there was no clear preference. All possibilities were popular.

Asked about desire to attend a reinforcement session in the fall, all but two respondents expressed a desire to attend such a seminar. One participant said, "There should be one every year." Requests for content of that seminar ranged from "more of the same" to requests for work on each specific area.

Profiles - Key Themes

The majority of key themes that appear in the profiles are positive reflections and comments made by participants about the course or their personal growth. They also identified weaknesses of the program and made suggestions for improvement.

Course content

Carla, Edward, Gary and Ned all referred directly to the practicality and usefulness of the course. Others identified having successfully used specific skills. Carla said, "It was not just idealistic and theoretical." Larry spoke of the adequate resources, Michael liked the research articles which could be given to staff, Denise mentioned using the verbal skills with teacher aides and Andy and Edward enjoyed success applying them to their students.

One of the most appreciated aspect of the course content was the common vocabulary and terminology that participants became accustomed to using. Several mentioned this as a strength of the course. Gary spoke highly of the "common language" that will allow administrators to "talk about the lack or excellence of techniques." Denise said the course gave her specific labels to identify effective teaching practices. Edward now has the vocabulary to specifically identify a technique in use and link it to an observed behaviour. Michael liked the "precise vocabulary and terminology" and Ned said, "I can categorize certain behaviour."

Much growth and individual development came from the discussion and sharing of ideas. Larry felt that the "collegial, relaxed atmosphere of the course" helped him in "getting to know the other administrators better." Iona appreciated "the opportunity to discuss techniques and research based materials with her colleagues." Denise mentioned that, "Although I was not always in agreement with the others, I benefited from the discussion." Kevin and Gary all called the interaction a strength of the course. Fred enjoyed the discussion more than the theory.

Attitudes and Beliefs

Modelling of the effective practices while teaching the course is important. At least eight of the participants spent time analyzing the instructional practices of the instructor. They commented on the match between his own practices and what he was teaching. Fred found the instructor "kept to his ideal" and was aware of the skills in use, Gary said the instructor, "made the course exciting by living example" and noted that the instructor's consistency "had a positive effect."

Many of the participants expressed their satisfaction with the outcomes of the course. They believed that it had given them the ability to embark on a coaching program as opposed to an evaluation program. Edward said it had given him the tools "to approach and initiate coaching with teachers" and that he now saw coaching as "not evaluation - but helping." James said the course has given him "the observation, analysis, discussion and knowledge" skills to work with teachers to transfer better teaching practices. Kevin has "the tools to adapt."

Larry said that prior to taking the course he had only a "basal knowledge" of the effective teaching skills and commented that he was comfortable with the ideas because he had the opportunity to contrast the new materials with what he had learned in previous classes. With this recognition came strengthened beliefs in the value of implementing the skills. Boris is glad he took the course because it reaffirmed much of his previous knowledge and made him feel good about his practices and those in his school.

Participants felt that they had been given the tools to change their teacher observation base from intuition to research based specific practices. Boris calls the methods "more specific as opposed to self-taught." He says he was previously using many of the skills unconsciously, and now is using them deliberately. Fred believed that it clarified and and reinforced the more positive aspects of his current teacher observation and conferencing techniques but that in the past he just "knew" when he was seeing effective teaching. Now he is able to break a lesson into specific observed skills for which he has convenient labels. Harry believes the course helped him move from "gut feelings to specifics" in identification of teaching behaviour, and in giving him "labels, ways to say," what he has seen.

Five administrators noted their strong tendencies to see the weaknesses before the strengths. Iona and Larry felt they had at least partially overcome this tendency; while the Ned was able to set them aside to work with the strengths first. Kevin felt a strong pull to have to correct those weaknesses immediately, but recognized the need for patience. Michael say he is unable to work on teachers having strengths until he had dealt with all 'survival level' teachers.

Criticisms and Suggestions

Most of the participants criticized the timing of the course as its greatest weakness. Andy, Edward, Fred, Gary, Harry, James, Iona, Kevin, Larry, and Ned all found fault with the timing of the course, a timing series selected by themselves earlier over the objections of the instructor. Harry, who had helped to arrange the course expressed "frustration with the time line and that was partly my doing." Some had suggestions for their timing preferences although there was no concensus. Some would have preferred up to twelve shorter sessions over a longer time, and others spoke in favour of an intensive five day long summer course.

The only classroom teacher in the course suggested that it should place a stronger emphasis on the fear that teachers feel before being visited for evaluation. She stated, "Administrators often do not realize the intensity or the impact of these fears." This is in sharp contrast to a number of the administrators who openly stated they did not believe their teachers would offer resistance to involvement in an improvement program.

Chapter Six

Conclusions and Recommendations

Summary of The Study

This study examined the course Coaching Teachers To Higher Levels of Effectiveness (Barkley, 1985) offered in Alberta under the sponsorship of the Alberta Teachers' Association. The course, developed originally for the University of South Florida in the United States, had not been previously empirically tested.

Chapter one reviewed the literature on coaching to date. The term coaching originates in1980 in the work of Bruce Joyce and Beverly Showers who provide the foundations for coaching (1980: 384). Research was reviewed that supported their work, related it to other areas of study, and showed other study related to the coaching concept.

Joyce and Showers first suggested the possibilities of coaching in 1980. They then tested the concept in transfer of training (1981) and in peer coaching (1984:50). Their conclusion was that the use of coaching provided a near guarantee of success in achieving vertical transfer of new teaching practices (1983:26). It received support from other researchers such as David Berliner

(Brandt, 1982:14) and Madeline Hunter (Brandt, 1985:64). These researchers promote the use of coaching to diagnose current practice of a teacher and to facilitate improvement of that practice.

Joyce and McKibbin (1982) showed that inservice staff development was most successful when it reached teachers at their professional maturity level. Glickman (1980) showed the need to individualize staff development. Joyce, Hersh and McKibbin (1983) showed that adding coaching to other current practices of inservice staff development was a way to greatly increase transfer of that training. Guskey (1985) showed that it was essential to help teachers become successful with a new teaching practice in their own classrooms before they would accept a commitment to that practice.

The proactive role of the school- based administrator in-staff development has been greatly encouraged. It is demanded by teachers (Young and Heichberger, 1975; Nickel, Traugh and Tilford, 1976) and supported by researchers who have studied school effectiveness Sweeney, 1982; Kuzsman and Harte, 1984; McCormack-Larkin, 1985; Wise, Darling-Hammond, Mclaughlin and Bernstein, 1985).

Reasons for the failure of other professional development to be implemented were reviewed. Barth (1985) showed the need for adults to create their own conceptions of quality before they implement improvement. Lieberman (1982) showed the need to relate new ideas directly to the students under a teacher's care to bring about implementation. McLaughlin (1976) suggested the need for "mutual adaptation" to bring about implementation of new ideas. Each of these requirements for success is implicit in coaching.

A number of coaching programs have been implemented and are discussed in the literature. The Edmonton Public School District (Mireau, 1983), St. Stephen, New Brunswick (Jones, 1985) and Santa Clara, California (Servatius and Young, 1985) are among those referred to.

Opposition to the coaching concept is found only in a study done by Ruth Wade (1983:53). Her arguments against it are refuted by Sparks (1984).

Chapter Three reviewed the methodology of this study. It described the formation and uses of the pre-test, the post-test, the interview, and the participant logs. It described the selection of participants and the grouping of these participants into subgroups for analysis. In addition to looking for changes in the total sample, changes were sought in groups divided by experience, school level, educational level, and administrative position.

Chapter Four provided the data collection. This collection included tables showing the pre-test and post-test results, and comparisons by subgroup. Also included were copies of participant responses to open-ended questions from the pre/post test, summaries of participant logs, and profiles of each participant based on the interview results.

Chapter Five provided an analysis of the results found in the data collection. The tables were examined to determine results occurring with a probability significant beyond 0.05 and 0.01. The open-ended question responses, the log summaries and the profiles were examined to identify changes in attitude or beliefs. Important and/or recurring themes were identified.

Participant attitudes and beliefs began to change during the third session. By session four most were feeling comfortable with the new ideas and learning and were expressing confidence about their ability to apply them. This confidence was supported by the interview results which showed that the participants believed that they had learned a great deal and were able to apply it at the end of the course.

Chapter Six includes conclusions about this course as drawn from the data analysis and suggestions for future offering of the course. Answers to the broad questions proposed at the beginning of the study are given.

Conclusions

A number of conclusions were possible based on the data collected. Information was available in answer to all of the broad question proposed at the beginning of the study. The study was an exploration of administrator behaviour as it was affected by the program Coaching Teachers to Higher Levels of Effectiveness offered in Alberta under the sponsorship of the Alberta Teachers' Association. The purpose was to identify changes, if any, in the attitudes, beliefs, and behaviours of the administrators participating in the project, and to compare the findings with the stated goals of the program. Data gathered provided information pertinent to the following broad questions:

1. What changes in attitudes, beliefs and behaviours occur to administrators enrolled in the ATA sponsored program Coaching Teachers to Higher Levels Of Effectiveness ?
2. To what extent do participants in the program believe that the course has contributed to improving their effectiveness as instructional leaders ?
3. To what extent does the program live up to its stated goals?

Participants noted changes in their attitudes relating to resistance to the course, in the change from negative to positive observations of teacher, and in the development of an open-minded approach to teacher observation.
A typical comment was that of Larry Lewis who mentioned in log four that it had been "his own resistance perhaps that needed changing most of all." He proceeded to say, "I've not totally bought in yet, but am almost there." Later in the interview he said that he believed that putting the skills to work in the fall would make him a complete believer.

Five administrators discovered in themselves a tendency to look for the negatives at the expense of the positive when observing teachers. Four of them reported in the logs that they had overcome or compensated for this tendency. The fifth at first passed the problem off to other administrators to do the coaching so he did not have to change, and later committed himself to change by embarking on a coaching program. It remains an inescapable conclusion that this course can change attitudes - not every time for every person, but with a high degree of success.

Changes in personal beliefs also appeared in this course. Several examples illustrate well these changes. Michael found he was too "authoritarian" and identified ways to downplay this. Kevin wrestled with the beliefs he had about being blunt and forthright about faults to bring about teacher improvement and concluded that "it [the slower coaching process] is right." James said the course "changed him by exposure" and that it "forces you to re-evaluate and reassess your own teaching styles," a process he concludes is helpful in helping other teachers reach their growth potential. The open-mindedness fostered by the course was best stated by Denise when she said, "I have learned there are methods which are more likely to bring about change: accepting a teacher where he is at ... ."

Behaviours changed as a result of this course as well. Some made immediate shifts. Typical was Iona who was in the middle of an improvement program with a teacher when she began the course. She changed some of her approach and says she will convert entirely to coaching with it in the fall. Others include Andy, who has revamped his lesson plans, Carla, who implemented the KTAV strategies immediately, and Denise, who tried the communication skills in her work with a teacher aide. Most have used some of the practices and found that their success strengthened their belief in them. Most participants have committed themselves to embarking on coaching within their schools in the fall. Several spoke of the motivational aspect of the course that encouraged them to try the skills on the job. Perhaps the most significant behaviour change was noted by Edward when he pointed out that coaching was changing them from "evaluation to helping."

The course had the stated objectives of increasing "participants' impact on teachers' performance" in three ways. Results obtained in this study show that the course met its objectives to a great extent. The objectives as stated in a Performance Learning Systems course outline sheet (Appendix A) were:

> To increase participants' impact on teachers' performance.
> a. Knowledge of research-proven effective teaching practices:
>   1. Questioning Techniques
>   2. Verbal Skills
>   3. Nonverbal Communication
>   4. Delivery of Content
> b. Practice in identifying these practices as well as recognizing their absence.
> c. Communication skills to effect positive change in teacher behaviour based on current practice and educational research.

First the course was successful in providing knowledge of research-based effective teaching practices. This success is pointed out by the nine effective teaching practice items on which the participants show a significant change:

1. The use of pause periods in questioning,

2. The impact of teacher nonverbal behaviour on class momentum,
3. The deliberate, purposeful use of teacher nonverbal behaviour,
4. The varied use of kinisthetic-tactual, auditory, and visual teaching strategies,
5. The matching of KTAV strategies to students' learning styles,
6. The use of similarities and differences to build a context for a lesson,
7. The use of labelling for new terms,
8. The use of new material by students at a level that demonstrates understanding, and
9. The use of new material integrated with previously learned material.

The success of the course in transferring knowledge was also shown by the twelve participants who identified one or more of the effective teaching practices as the aspect of the course in which they felt the strongest. Many have already started making plans to expose their teaching staff to the knowledge either by coaching or inservice. Typical examples would be Boris and Larry who plan on working with their assistant principals to expose the rest of their teachers to the material.

Second, the course was to give participants practice in identifying these practices as well as recognizing their absence. Once again several participants mentioned in their logs and profiles that they appreciated the exposure to watching other teachers practice the skills and that it had given them a clearer focus for their classroom observations. Denise was one administrator who found that having the opportunity to watch, think about, and discuss the filmed teachers gave direction to her own thinking.

The third objective was to give the participants "communication skills to effect positive change in teacher behaviour based on current practice and educational research." By log three at the end of the second weekend, most participants were expressing some degree of comfort with these skills. Typical of responses that acknowledged the strength of the positive reinforcement, and the power of recognizing the agenda of the teacher was that of James who said the communication skills had given him, "an ability to direct each activity towards your [my own] goals." The course is effective at training the necessary communication skills.

This success is supported by the learning the participants showed in meeting resistance. They showed an ability to recognize when to use each skill taught, and expressed much confidence in their ability to meet resistance. What hesitation was expressed will only be overcome with practice. Practice and future reinforcement of what has been taught is important.

Not every participant's attitudes changed as completely as the course designers may have hoped. Yet, even those who may not implement full coaching programs recognize the power of the process and the strength of the skills they have been given, and appreciate the effective teaching practices information and the communication skills. The course will not be completely successful with everyone. The charts, logs, and profiles still suggest that most administrators will benefit professionally from taking this course. Leithwood and Montgomery (1982: 336) noted that, "Effectiveness is clearly a continuous rather than a bipolar condition." Perhaps the change seen reflects the individual's position on the continuum.

Recommendations For Course Offerings

A number of recommendations concerning the way the course should be offered arise from this study. These concern course timing, participant pairing, instructor selection, and encouragement to attend.

The timing of this course was criticized by twelve of fourteen participants. The course is designed to be offered in any one of several time formats: These include:

1. One three hour session each week for twelve weeks,
2. Six six hour day-long sessions spread over three weeks,
3. Four nine hour weekend sessions, or
4. Thirty-six hours of instruction in one week.

The selection of four weekends, three hours Friday night and six hours on Saturday was made at the request of the Division personnel organizing the course. Many of the participants were driving fifty miles to attend, and at their request, and over the objections of the instructor, the Friday was dropped and nine hours of classes were held on Saturday beginning with the second weekend. This condensing of the course made it difficult for all to absorb the quantity of information presented each time. While the results still show a significant increase in the participants' knowledge, the recommendation arising from this course is that whenever possible the course should be taught in more frequent short segments.

The course is also designed to be taught with either of two combinations of teacher/administrator participants:

1. coaching trainees (administrators or teachers) only who practice in class with one another and in their own job situations with other staff members as they choose, or

2. administrator and teacher pairs who practice with one another in class and attempt to put their learning to effect back in their schools.

The Division priority for this course was to fund its administrators and expose them to the benefits of the course. This was successful. Yet many of them felt that having a partner working with them both at the course and practicing in the school would have increased the effectiveness of the course. Eleven participants said the course should be offered to pairs. Offering the course to pairs would ensure the participants implemented the skills through practice in school at the same time that it ensured the skills were introduced to a school and were visible to non-participating members of the staff. The recommendation arising from this study is that whenever possible the course should be taught to pairs of participants from the same school or area who are able to practice together the new skills between sessions.

Eight participants mentioned in the logs the power and reinforcement of having an instructor who practiced the skills in his teaching to them. They believed that the instructor's ability to model the skills he was teaching strengthened the course greatly. Typical of participant reaction was Gary's statement, "The instructor consistently lived up to his teaching. This consistency had a positive effect." The recommendation arising from this study is that the ATA, the sponsoring body, should continue to select as instructors only those people who have significant experience and familiarity with the other courses on which this one is based.

The strong positive results recorded and comments expressed by participants in this course suggest the high value of the course for updating inservice administrators and teachers. One of the participants made a suggestion that has also been raised elsewhere: this course should be given credit as a graduate level university course. It was designed as such for the University of South Florida and is accepted at many Universities and Colleges in the United States. The ATA should continue offering and encouraging participation in the course while attempting to arrange with one of the Alberta universities for credit to be granted for it.

Recommendations for Future Research

This course is a composite course made of portions of three other ATA sponsored courses in effective teaching practices. An empirical evaluation of each course would be valuable.

In this study the researcher and the course instructor were the same person. Because of the volunteer and high commitment nature of the participants of the program this dual instructor/researcher role may not have affected the results. It would be desirable to have a second study done by a different researcher to validate the results obtained here. A study based on a course taught with teacher/administrator pairs would be most desirable to determine the extent to which the immediate reinforcement through practice increases the value for the participants.

A question that remains unanswered by this study is the attitude of secondary school administrators toward 'hands-on" in classroom work with their teachers. Elementary administrators showed a much higher level of growth in this course. Because the number of secondary administrators was so small (N = 4), no final conclusions can be drawn at this time. A further study of the willingness of secondary administrators to do do formative work with their teachers is indicated, and also a re-evaluation of this course offered to a larger group of secondary administrators.

Leithwood and Montgomery (1982: 311) suggested that, "the elementary and secondary school contexts are sufficiently different to warrant independent attention to the two principal roles." Yet, the secondary administrators all left this course pleased enough to recommend it to others. Perhaps further research with secondary administrators could suggest ways in which the course could be tailored to their special needs.

One further area of research for which a need is shown in this study is that of teacher fear of evaluation. The opinions of the teacher participant are directly opposed to those of the administrators. There may be a lack of understanding of the problem.

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Appendix A

Performance Learning Systems of New Jersey is the private company who originated and market the course Coaching Teachers to Higher Levels of Effectiveness (Barkley, 1985). Distribution of the course in Alberta is handled by agreement with them by the Alberta Teachers' Association (ATA). The following document is provided to the ATA by Performance Learning Systems as an outline of the course.

Coaching Teachers To Higher Levels of Effectiveness

Description. This course is designed to coach teachers to perform at higher levels of effectiveness. Superintendents, principals, vice-principals, department chairpersons and classroom teachers will be synthesizing the research on effective teaching; identifying teacher strengths and areas for growth using observation based on effective teaching research; practicing the verbal and nonverbal skills vital to the coaching process; and practicing the conferencing and coaching process specifically designed to improve teacher performance.

Objectives. To increase participants' impact on teachers' performance.

a. Knowledge of research-proven effective teaching practices:

1. Questioning Techniques
2. Verbal Skills
3. Nonverbal Communication
4. Delivery of Content

b. Practice in identifying these practices as well as recognizing their absence.

c. Communication skills to effect positive change in teacher behaviour based on current practice and educational research.

Methods. Programmed learning, case studies, role plays, simulations, lecture, group discussion.

Course Outline.

a. Open and Closed-Ended Questions; Confirmatory and Leading Paraphrases: verbal skills to guide dialogues to predictable desirable conclusions and decrease negative or argumentative responses.

b. Positive Phrasing, Supporting Statement, Empathy Statement, Approval Statement: supportive verbal skills for maintaining discipline and building rapport and reducing the number and intensity of problems.

c. Memory, Comprehension, Creative and Evaluative Questions: to increase proficiency at asking all modes of questions and to increase effectiveness of questions by a) increasing clarity;

b) utilizing pause periods and probes, and c) responding appropriately to correct, incorrect, partially correct and evasive answers.

d. Teachers' Nonverbal Communication: positiveness, congruency between verbal and nonverbal signals, using space as a control technique; adopting a positive mental set and generating enthusiasm through nonverbal means; showing interest and involvement; gestures to be avoided.

e. Kinesthetic Tactual, Visual and Auditory Learning Styles: will help administrators to help teachers gain insight into how students learn. Enables them to identify their own learning styles using an educational inventory and neurolinguistic techniques. Help teachers to use these observation skills in their classrooms on a daily basis to assess the learning styles of the students they teach. Teachers will compare their own learning styles to those of their students in order to learn how to expand their teaching strategies to meet the needs of al students. This section is taught through filmstrips, inventories, role-plays, in-class practice of skills and three (3) filmstrips of classroom teachers demonstrating the skills.

f. In this section participants will learn the perceptual process through which all students learn: same, different, label, operate and combine. They will examine the importance of each part of this process, and learn by practicing to implement these skills in their classrooms. This section of the program employs programmed instruction, simulations, lesson planning, role-plays and has three (3) filmstrips of classroom teachers demonstrating the skills.

g. Understanding the role of the administrator in improving instruction.

h. Participants will be able to plan and implement coaching conferences with teachers.

i. Participants will be able to plan and evaluate school based staff development programs.

Appendix B

Agendas

Session One Agenda

Friday Evg.
- a. introduction and discussion of goals
- b. registration formalization
- c. pre-test
- d. overview: why, how, where
- e. Conferencing Skills: Agenda Seeking
  - OEQ, CEQ, CP
  - Episodes 1 and 2
- f. Effective Teaching Practices: Questioning
  - Modes of Questioning
- g. Research Article
  - Is the O.K. Classroom O.K. ?

Saturday a.m.
- a. Conferencing Skills
  - Episodes 3 and 4
  - Hamlet Lesson: Role Play
  - Action Assignment
- b. Effective Teaching Practices: Questioning
  - Question Clarity
  - Pause Periods
  - Probes
  - Questions Card
  - Action Assignment

Saturday p.m.

- a. Conferencing Skills: Meeting Resistances

PP, ES, SS, ApS
Action Assignment
Supportive Skills Assignment
b. Coaching
Stallings Model
Hamlet Lesson: Role Play

TRY IT ! YOU'LL LIKE IT !
ENJOY !

Session Two Agenda

Saturday A.M.

8:00 a.m. a. Session Objectives
b. Review: Conferencing Skills :
Agenda Seeking: OEQ CEQ CP
Resistance Skills: PP ES ApS SS
Episodes 5 and 6
Resistance Overlap (p. 31)
Role Play
Demonstration
10:15 a.m. Coffee Break
10:30 a.m. c. Coaching : Stallings Model
Research Article: Sparks (Appendix)
Step by Step Explanation
Role Play
d. Research Article:
Strother: "The Many Roles of the Effective Principal"
12:00 p.m. Lunch Break
12:30 p.m. e. Effective Teaching Practices:
Teachers' Nonverbal Communication
Filmstrip/Tape
Guidelines
Tactical Emplacement (p.60)
Action Assignment
Research Articles:
Hasenstab and Starke: "Double Messages" (p. 63)
Barkley: "Nonverbal Communication "

2:30 p.m. Coffee
2:45 p.m. f. Coaching: Research Article:
Tyler: " A Place Called School"
Cross: " The Rising Tide of School Reform Reports"
Field Dependent Model
Step by Step Analysis
Role Play
Demonstration
5:00 p.m. Logs, Comments/Questions - Adjournment

The suggestion of a need for coaching does not suggest that we are less that we could be. When an Olympic diver gets a 10 card for his performance, does he fire his coach ? When Glen Sather suggests a play to Wayne Gretzky, does he listen ? It is tougher to coach the best in the field.

Coming Up: Session Three: Effective Teaching : Learning Styles
Coaching: Conferencing Model
Research Articles
Session Four: Effective Teaching: Perceptual Interpretation
Coaching: Timing, Planning, Practice
Research Articles

Session Three Agenda

Saturday a.m.

8:00 a.m.
- a. Session Objectives
- b. Review: **Conferencing/Coaching**
  - Verbal Skills: OEQ CEQ CP ES SS ApS - Skill route
  - Coaching Models: Stallings, Field Dependent
- c. Review: **Effective Teaching Practices**
  - Questioning Strategies
  - Nonverbal Communication
- d. Coaching Session
  - Research: Guskey, Dunkin and Biddle

10:15 Coffee Break

10:30 e. **Effective Teaching Practices: Learning Modalities**
Classrooms Exercise
Personal Preference Inventories
Neurolinguistic Research Filmstrip
12:00 p.m. Lunch
12:30 f. Using Modalities in The Classroom
Triad Activities
Research Articles: Barbe and Milone: Modalities
Goodlad: A Study of Schooling
2:00 Coffee Break
2:15 g. **Coaching**: Observational Practices
Reading Comprehension Exercise
Describing Behaviour Exercise
Anecdotal Note Taking
Observational Scripting: Hunter Article
Practice Session
Conferencing Model
Step by Step Explanation
Research Article: Kindsvatter and Wilen
Role Play
Demonstration
h. Research Article: Alfonso, Firth, Neville: Skill Mix
5:00 i. Logs, Comments/Questions - Adjournment

Excellence: That which we will always be striving to achieve !

Agenda: Session Four

8:00 a.m. a. Session Objectives
b. Review: Agenda Skills
Resistance Skills - Perception Check
Questioning Skills - Clarity
Teacher Nonverbals - Pairing Exercise
Tonality Handout
KTAV - Barbe and Milone Inventory

- Challenge
Coaching Models - Entry Biases Exercise
Three Models

10:00 Coffee
10:15 c. Coaching Practice Session
11:15 d. **Effective Teaching Practices**: SDLOC
    Programmed Learning
    Filmstrip and discussion
12:00 Lunch
12:30 e. Operate with SDLOC
    Reading Comprehension Exercise
    Word Learning with KTAV And SDLOC
    Lesson Expansion
2:00 f. **Coaching:** Implementation
    Consideration of Teacher Level
    Timing
    Research Articles
    Personal Application
3:00 g. Guided Practice
    Coaching Role Play and Demonstration
4:00 h. Post-test
    Comments and evaluations
    Certificates
5:00 Adjournment

Why should we coach ?

Give a man a fish and he eats for a day.
Teach him to fish and he eats forever.

Appendix C

Pre-test and Post-test

Pre-Test: Coaching Teachers to Higher Levels of Effectiveness

1. To what extent are you able to judge the existence of the following in the observation of a teacher:

KEY:
0 = not at all
1 = somewhat able
2 = moderately able
3 = reasonably able
4 = very able
5 = highly able

1.	The use of a variety of levels of questions	0	1	2	3	4	5
2.	The use of questions that are clear and understandable to the students	0	1	2	3	4	5
3.	The use of pause periods in questioning	0	1	2	3	4	5
4.	The appropriateness of teacher responses to student answers	0	1	2	3	4	5
5.	The impact of teacher nonverbal behaviour on class momentum	0	1	2	3	4	5
6.	the deliberate and purposeful teacher use of nonverbal behaviours	0	1	2	3	4	5

7. the varied use of kinesthetic -tactual, auditory and visual teaching strategies (KTAV)	0	1	2	3	4	5
8. The matching of KTAV strategies to students' learning styles	0	1	2	3	4	5
9. The use of similarities and differences to build a context for a lesson	0	1	2	3	4	5
10.The use of labelling for new terms	0	1	2	3	4	5
11.The use of new material by students at a level that demonstrates it is understood	0	1	2	3	4	5
12.The use of new material integrated with previously learned material	0	1	2	3	4	5

2. To what extent do you work formatively with teachers to accomplish the following:

KEY:
0 = not at all
1 = somewhat able
2 = moderately able
3 = reasonably able
4 = very able
5 = highly able

2.1 identification of teacher strengths	0	1	2	3	4	5
2.2 identification of teacher weaknesses	0	1	2	3	4	5
2.3 identification of areas for instructional growth	0	1	2	3	4	5
2.4 the improvement of instruction in a specifically identified area	0	1	2	3	4	5
2.5 overcome resistance to change and promote acceptance of new						

procedures 0 1 2 3 4 5

2.6 expansion of lesson design to include improved instructional techniques 0 1 2 3 4 5

3. As a practising administrator you observe teachers at work and provide them with feedback on their performance. Please list up to three elements of teaching that you look for.

   a.
   b.
   c.

4. Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ? Please circle:

0	1	2	3	4	5
None	Low				High

5. Please list up to three constraints or obstacles to your role as instructional leader.

   a.
   b.
   c.

6. Imagine that you are meeting with an experienced teacher on a continuing contract to discuss the observations that you have made in his/her classroom. You have observed a weakness in questioning strategies.

   a. Based on your experience in this or similar situations, state the objections or resistances that you would expect to meet when you introduce this weakness into the discussion.

   b. What can you do to overcome this resistance ?

7. Suggest three activities that you might suggest to a teacher to help him/her teach any **three** of the following topics to a class:

1. desert plants:
a. ____
____
b. ____
____
c. ____
____

2. the growth of frogs:
a. ____
____
b. ____
____
c. ____
____

3. area of a circle:
a. ____
____
b. ____
____
c. ____
____

4. the feudal system:
a. ____
____
b. ____
____
c. ____
____

5. the Charter of Rights:
a. ____
____
b. ____
____
c. ____
____

6. double digit multiplication:

a. ____
____
b. ____
____
c. ____
____

Post-Test: Coaching Teachers to Higher Levels of Effectiveness

1. To what extent are you able to judge the existence of the following in the observation of a teacher:

KEY:
0 = not at all
1 = somewhat able
2 = moderately able
3 = reasonably able
4 = very able
5 = highly able

1. The use of a variety of levels of questions	0	1	2	3	4	5
2. The use of questions that are clear and understandable to the students	0	1	2	3	4	5
3. The use of pause periods in questioning	0	1	2	3	4	5
4. The appropriateness of teacher responses to student answers	0	1	2	3	4	5
5. The impact of teacher nonverbal behaviour on class momentum	0	1	2	3	4	5
6. the deliberate and purposeful teacher use of nonverbal behaviours	0	1	2	3	4	5
7. the varied use of kinesthetic -tactual, auditory and visual teaching strategies (KTAV)	0	1	2	3	4	5
8. The matching of KTAV strategies to students' learning styles	0	1	2	3	4	5
9. The use of similarities and differences to build a context	0	1	2	3	4	5

for a lesson						
10.The use of labelling for new terms	0	1	2	3	4	5
11.The use of new material by students at a level that demonstrates it is understood	0	1	2	3	4	5
12.The use of new material integrated with previously learned material	0	1	2	3	4	5

2. To what extent will you in future work formatively with teachers to accomplish the following:

KEY:
0 = not at all
1 = somewhat able
2 = moderately able
3 = reasonably able
4 = very able
5 = highly able

2.1 identification of teacher strengths	0	1	2	3	4	5
2.2 identification of teacher weaknesses	0	1	2	3	4	5
2.3 identification of areas for instructional growth	0	1	2	3	4	5
2.4 the improvement of instruction in a specifically identified area	0	1	2	3	4	5
2.5 overcome resistance to change and promote acceptance of new procedures	0	1	2	3	4	5
2.6 expansion of lesson design to include improved instructional techniques	0	1	2	3	4	5

3. As a practising administrator you observe teachers at work and provide them with feedback on their performance. Please list up to three elements of teaching that you look for.

a.
b.
c.

4. Given all of the other role requirements of the principalship, what priority do you give to instructional improvement ? Please circle:

0	1	2	3	4	5
None	Low				High

5. Please list up to three constraints or obstacles to your role as instructional leader.

   a.
   b.
   c.

6. Imagine that you are meeting with an experienced teacher on a continuing contract to discuss the observations that you have made in his/her classroom. You have observed a weakness in questioning strategies.

   a. Based on your experience in this or similar situations, state the objections or resistances that you would expect to meet when you introduce this weakness into the discussion.

   b. What can you do to overcome this resistance ?

7. Suggest three activities that you might suggest to a teacher to help him/her teach any **three** of the following topics to a class:

   1. desert plants:
   a. ______________________________
   ____
   b. ______________________________
   ____
   c. ______________________________
   ____
   2. the growth of frogs:
   a. ______________________________
   ____

b. ______________________________

c. ______________________________

3. area of a circle:

a. ______________________________

b. ______________________________

c. ______________________________

4. the feudal system:

a. ______________________________

b. ______________________________

c. ______________________________

5. the Charter of Rights:

a. ______________________________

b. ______________________________

c. ______________________________

6. double digit multiplication:

a. ______________________________

b. ______________________________

c. ______________________________

Appendix D

INTERVIEW BASE

1. To what extent did the course make you aware of your own attitudes and beliefs about helping teachers improve.

1 2 3 4 5
Very little A Great Deal

2. To what extent were you comfortable with what you learned about yourself ?

1 2 3 4 5
Very Little A Great Deal

3. To what extent do you believe that this course has contributed to improving your effectiveness as an instructional leader in the school ?

1 2 3 4 5
Very Little A Great Deal

4. To what extent has the course increased your impact on teacher performance ?

1 2 3 4 5
Very Little A Great Deal

5. To what extent do you believe that you will continue to change as a result of this course ?

1 2 3 4 5
Very Little A Great Deal

6. To what extent do you feel that you could identify in a lesson the presence or absence of each of the effective teaching practices that were studied in the course ?

1 2 3 4 5
Very Little A Great Deal

7. To what extent could you have identified these before taking the course ?

1 2 3 4 5
Very Little A Great Deal

8. To what extent will the communications skills studied help you to effect change in teacher behaviour?

1 2 3 4 5
Very Little A Great Deal

Appendix E

Log Questions

Log One

Please answer the following questions based on what you know about the course so far.

1. Why did you enroll in this course ? Please list up to three reasons.

2. What is the area of highest interest to you?

3. From what area of the course do you expect to learn most ?

4. Do you have any questions or comments ?

Log Two

Please answer the following questions based on your experiences in the course today.

1. Describe the feelings that you experienced with role playing:
    - before
    - during
    - after

2. What strengths do you see in the Stallings model for staff improvement.

3. Comments / Questions ?

Log Three

Please answer the following questions based on today's work.

1. What have you gained from the study of the conferencing skills?
   (OEQ CEQ CP PP ES ApS SS)

2. Has the presentation of Effective Teaching Practices been useful to you so far ?

   In what ways ?

   How do you see yourself using them in future ?

3. Which of the coaching models appeals to you ? Why ?

Log Four

Please answer the following questions based on your experiences in the course so far.

1. How is your knowledge of effective teaching expanding ?

2. In what ways is this course helping you to feel able to meet teacher resistance and bring about an openness to change ?

3. In what ways has this course helped you to expand your awareness of your own mindset, values, and preferences ?

Log Five

Please answer the following questions that ask you to reflect on what has happened throughout this course.

1. In what areas of the course do you feel strongest ?

2. In what areas of the course do you feel weakest ?

3. If a one-shot reinforcement session was held early in the fall, would you want to attend ?

4. What would you like to see offered at a one shot session as described above ?

5. How did the use of the pre-test, post-test structure help you to focus on change in yourself ?

6. To which of the following personnel groups from your school would you recommend this course ?

_____ administrator teacher pairs
_____ teacher pairs
_____ administrators alone (no guaranteed follow up)
_____ teachers alone (no guaranteed follow up)
_____ individual teachers with whom you would like to follow up with a coaching program
_____ no one - would not recommend